

DOCUMENT RESUME

ED 096 296

SP 008 426

AUTHOR Johnson, Susan Buchwald
TITLE The Effects of Tactile Communication in Sport on Changes in Interpersonal Relationships Between Black and White Children.
PUB DATE Aug 73
NOTE 90p.; Master's thesis, Memphis State University
EPPS PRICE MF-\$0.75 HC-\$4.20 PLUS POSTAGE
DESCRIPTORS *Athletic Activities; *Caucasian Students; Elementary School Students; *Grade 3; *Interpersonal Relationship; *Negro Students; Physical Activities; Sensory Experience

ABSTRACT

This study determines the effects of tactile communication in sport on changes in interpersonal relationships between black and white children. The experimental design consisted of three treatment groups each emphasizing tactile, cooperative, or individual experiences in physical education. The control group participated in tactile, cooperative, and individual activities. Subjects, consisting of 235 elementary school children representing four integrated, self-contained, third-grade classes in two schools, were pretested by a sociometric rating scale to determine their interpersonal relationship status with other children. After participating in a 6-week sports unit, the subjects were posttested on the same sociometric rating scale. Results indicated that there is a statistically significant change in a positive direction in interpersonal relationships of black children who experience tactile communication with white children in sport and that there is not a statistically significant change in a positive direction in interpersonal relationships of white children who experience tactile communication with black children in sport. (Author)

THE EFFECTS OF TACTILE COMMUNICATION IN SPORT
ON CHANGES IN INTERPERSONAL RELATIONSHIPS
BETWEEN BLACK AND WHITE CHILDREN

A Thesis
Presented to
the Faculty of the Graduate School
Memphis State University

In Partial Fulfillment
of the Requirements for the Degree
Master of Education

by

Susan Buchwald Johnson

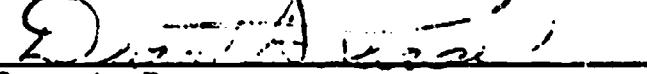
August 1973

U S DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION OR SOURCE
AT NO. 1. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF
EDUCATION POSITION OR POLICY

To the Graduate Council:

I am submitting herewith a thesis written by Susan Buchwald Johnson entitled "The Effects of Tactile Communication in Sport on Changes in Interpersonal Relationships Between Black and White Children." I recommend that it be accepted for six hours of credit in partial fulfillment of the requirement for the degree of Master of Education, with a major in Physical Education.

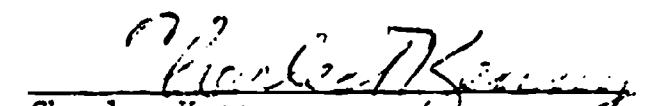


Dean A. Pease
Assistant Professor of Health,
Physical Education, and Recreation
Major Professor

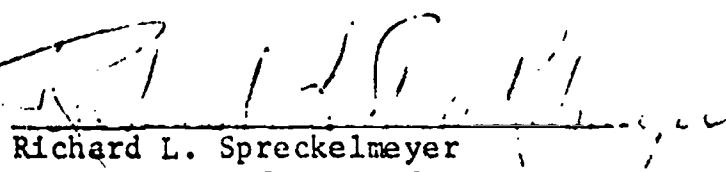
We have read this thesis and
recommend its acceptance:



Darrell Crase
Associate Professor of Health,
Physical Education, and
Recreation

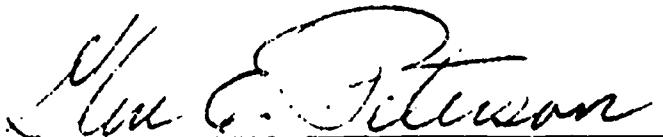


Charles Kenny
Assistant Professor of Psychology



Richard L. Spreckelmeyer
Associate Professor of
Educational Foundations

Accepted for the Graduate Council:



Glen E. Peterson
Dean of the Graduate School

ACKNOWLEDGMENT

Without the inspiration and assistance of a great many individuals, this research would never have been brought to completion. William D. Callian, Assistant Superintendent of Instruction, and Dr. O. Z. Stevens of the Bureau of Research, Memphis City Schools were most helpful, as were the principals and teachers at the two elementary schools involved in this study. Mrs. Margaret G. Taylor and Miss Dorothy Dean rendered invaluable assistance.

Appreciation is expressed to Kurt Kunzel, Jim McGee and Dr. J. Paul Price who offered their time and professional services concerning the statistical computation involved in this study. Appreciation is also extended to the physical education instructor, Miss Peggy Matthews, who was most generous with her time and with her skills in working with young children.

Special acknowledgment is given to Dr. Dean A. Pease, the committee chairman of this thesis, for his enduring interest. He tirelessly read many drafts, offered invaluable suggestions and is to be credited with some of the crucial insight which added to the quality of this investigation. Also, Dr. Charles Kenny who conceived of many of the most significant aspects of this study, unselfishly offered his time and professional supervision. Dr. Darrel Crase and Dr. Richard L. Spreckelmeyer both improved this study through their comments and criticisms. The encouragement and assistance of these people are greatly appreciated.

TABLE OF CONTENTS

	Page
LIST OF TABLES	iv
LIST OF FIGURES	v
Chapter	
1. INTRODUCTION AND THE PROBLEM	1
The Problem	8
The Hypothesis	8
Significance of the Study	9
2. METHODOLOGY	10
Design	10
Subjects	12
Measurement	13
Procedures	14
Statistical Procedures	15
3. ANALYSIS OF THE DATA	18
Descriptive Data	18
Subjects	18
Validation of Tactile Communcation	19
Testing of the Hypothesis	21
Blacks Rating Whites	21
Additional Black-Rating-White Findings	23
Whites Rating Blacks	24
Additional White-Rating-Black Findings	25
Summary	26

4. DISCUSSION	27
Perceptions According to Race	27
Perceptions According to Group	29
The Tactile Group	29
The Cooperation Group	30
The Individual Group	30
The "Recess" Group	31
5. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	33
Summary	33
Conclusions	35
Recommendations	37
BIBLIOGRAPHY	40
APPENDIX A	43
APPENDIX B	75
APPENDIX C	78

LIST OF TABLES

Table	Page
1. The Subjects (School x Sex x Race x Treatment)	19
2. Recorded Incidents of Tactile Interaction	20
3. ANOVA Summary of Blacks Rating Whites	22
4. Scheffe' Test for Significant Differences Among Means: Blacks Rating Whites	22
5. ANOVA Summary of Whites Rating Blacks	24
6. Scheffe' Test for Significant Differences Among Means: Whites Rating Blacks	25
7. ANOVA Summary of Difference Between Composite Means of Blacks Rating Whites & Whites Rating Blacks	25

LIST OF FIGURES

Figures	Page
1. Symmetrical A-B-X Model of Orientation (Individual)	4
2. Asymmetrical A-B-X Model of Orientation (Individual)	5
3. Symmetrical A-B-X Model of Orientation (Collective)	5
4. Schematic Representation of the Problem	8
5. Research Design .	10
6. Analyses of Variance by Race Perception	15
7. Example of Multi-level Factorial Analysis of Variance with Repeated Measures (Black Rating White; White Rating Black) .	17
8. Group: Blacks Rating Whites	79
9. Subject-Sex: Blacks Rating Whites	80
10. Group x Subject x Sex: Blacks Rating Whites	81
11. Group x Subject-Sex x Rater-Sex: Blacks Rating Whites . .	82
12. Group: Whites Rating Blacks	83
13. Group x Subject-Sex x Rater-Sex: Whites Rating Blacks . .	84
14. Individual Systems of Orientation During Social Interaction .	28
15. Asymmetrical A-B-X Model of Orientation (Collective) . .	28

Chapter I

INTRODUCTION AND THE PROBLEM

In the course of the last two decades there has been extensive and dramatic action affecting race relations in the United States. Two major events emanated as historic milestones: (1) the Supreme Court decision of May, 1954, which outlawed segregation in the public schools; and (2) the 1957 enactment by Congress of the first federal civil rights bill since Reconstruction. Unfortunately, many events of a social nature which are related to an expression of conflict and violence have also transpired. America has witnessed the emergence of militant groups accompanied by revolutionary actions of protests, boycotts, race riots, destruction and killing. The actions of prejudice, not always violent, are found in our society through subtle forms of discrimination, exclusion, and segregation. Reviewing these significant developments in this country's recent history leads to the growing awareness that black and white Americans are increasingly fostering and perhaps even institutionalizing racial prejudice.

Racial prejudice is the tendency to evaluate a person, not as an individual, but as a member of a group. There is a basic belief that the members of that group are inferior. Prejudice, like all attitudes, motivates individuals to act toward those "inferior" individuals in special ways while engaged in social interaction. While social interaction can create either positive or negative interpersonal relationships depending upon the degree of attraction between the individuals, the

underlying negative attitudes of prejudice bring about overt negative behavior resulting in negative interpersonal relationships. This display of negative interpersonal relationships is increasing in this country to the level of currently being an extremely volatile social issue.

In an attempt to understand the racial forces operating in our society, sociologists and psychologists have examined the notion of prejudice and have investigated the causes and effects of these resultant negative interpersonal relationships. The most solid social-psychological evidence of racial attitude change comes from studies investigating social contact. Numerous research findings denote that whites who have had previous social contact with blacks are less prejudiced than whites who have had no such contact. These findings were confirmed in studies concentrating on public housing residents (Deutsch and Collins, 1951; Jahoda and West, 1951; Wilner, Walkley, and Cook, 1955; and Works, 1961), servicemen (Stouffer, Suchman, DeVinney, Star, and Williams, 1949; Mannheimer, 1945), merchant marines (Brophy, 1946), government workers (MacKenzie, 1948), policemen (Kephart, 1957), students (MacKenzie, 1948) and general small town populations (Williams, 1964).

Allport (1954), in an intensive review of research concerning the relationship between social interaction and the reduction of racial prejudice concluded that four characteristics of the contact situation are of the utmost importance. Prejudice is lessened when the two groups (1) possess equal status in the situation, (2) seek common goals, (3) are cooperatively dependent upon each other, and (4) interact with the positive support of authorities, laws or customs. All four of these conditions maximize the likelihood of shared values and beliefs being manifested and mutually perceived. According to many sociologists and

psychologists, inferences derived from the conditions outlined by Allport seem to generate the greatest fruition toward changing racial prejudice. A question of importance, to be discussed later in more detail, is where in society do these four conditions exist?

Communication is the vehicle of social interaction. In order to communicate meaning man uses symbols, things which represent other things. These symbols may be expressed verbally as well as nonverbally. Krout (1942) has stated, "An object, a movement, a word, or graphic expression may be used as a symbol and any of these may truly speak (p. 16)." Communication of expressive meanings may ultimately lead to changes in human attitudes, and the forces of prejudice can only be altered by changes in these attitudes.

Many cognitive field theories have contributed greatly toward increasing an understanding of how attitudes and attitude change affect an individual's social-psychological world. Such theories may assist in the investigation of prejudice and the negative interpersonal relationships existing between blacks and whites. A closer examination of the cognitive theoretical framework may be fruitful for understanding attitude change.

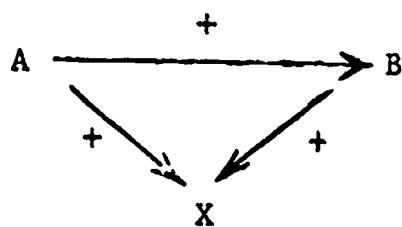
Contemporary cognitive theory in social psychology is a direct descendant of Gestalt and field theory. Both of these intellectual ancestors emphasized the notions of "field" and organization. A "field" refers to "a system of coexisting and mutually interdependent factors having certain properties as a system that are not deductible from knowledge of the isolated elements. . . (Deutsch and Krauss, 1965, p. 15)." The concept of organization refers to the assumption that individuals attempt to achieve some kind of psychological (subjective) order in their field.

Essentially, theories of attitude change suggest that many attitudes exist in a "field." Of course, not all of these attitudes are relevant to each other. Those that are relevant to each other, however, strive toward organization, that is, toward balance, symmetry, or consonance. Attitudes must "fit" with each other so that the field is relatively stable. Any attitude which does not fit must change or remain in discord.

Newcomb (1961), commonly associated with the cognitive theories of attitude change, has formulated an A-B-X model of the communication process. The formulation of the A-B-X system includes the notion that attitude change is influenced by attraction. This notion is well substantiated in the social-psychological literature (Festinger, Schachter, and Back, 1950; Homans, 1950; and Newcomb, 1934; 1961).

This model is composed of person A, person B, and some attitude object, X. Attraction being designated by a "+" and repulsion by a "-", Figure 1 represents a symmetrical model. A is attracted to B and to X, and B is attracted to X.

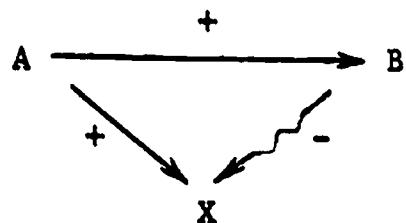
Figure 1
Symmetrical A-B-X Model
Of Orientation (Individual)



In Figure 2, a variation of Figure 1, X is repelled by B. In this case, the system (field) is unbalanced (asymmetric, dissonant) and there is a consequent pressure to change. To restore the field to an

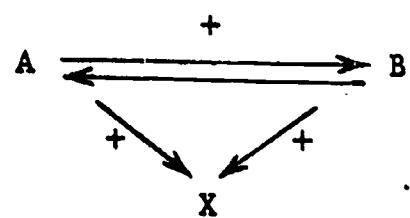
organized or balanced state, A must change either his attitude toward B or his attitude toward X.

Figure 2
Asymmetrical A-B-X Model
Of Orientation (Individual)



While these figures represent oversimplified views of individual systems of orientation, Newcomb argues that there is also a collective system of orientation in which A and B "coorient" their attitudes toward each other (see Figure 3).

Figure 3
Symmetrical A-B-X Model
Of Orientation (Collective)



Communication between persons A and B concerning X is a precondition for the existence of a collective system of orientation. However, for communication to occur it must be assumed by both A and B that (1) some degree of attraction, either positive or negative, exists on the part of each toward the other; and (2) each of them has an attitude, either positive or negative, toward the same X. This study is concerned with the collective system of orientation, that is, with blacks and whites communicating under conditions of sanctioned social interaction.

Newcomb's theory suggests that communication is a means of formulating attitudes between individuals. Recently, emphasis has been given to the relative importance of nonverbal communication in determining the course of interpersonal relationships (Halpin, 1960). Tactile communication, communication by means of touch, is one form of nonverbal symbolism. However, the meaning of tactile communication is often dependent upon the cultural setting. In other words, the cultural setting within which the symbol is utilized often creates and defines the function of that symbol.

Frank (1957), Goffman (1961), and Hall (1954) suggest that people in the American culture dislike experiencing tactile communication with other individuals because it is considered to be an invasion of privacy. Frank has pointed out that each person learns to respect the inviolabilities by refraining from approaching, touching, striking, or otherwise invading the private property, or person, of others. Again, these are defined by his culture. On the other hand, tactile communication in the proper cultural setting can express such desirable feelings of attraction as affection, approval, acceptance, warmth, friendliness, trust, and encouragement. These feelings are witnessed in the responses of babies being cuddled, people greeting one another, athletes embracing, and couples mutually expressing intimate behavior.

Newcomb's A-B-X model suggests that tactile communication can be a powerful tool in the formulation of positive interpersonal relationships between individuals. Assuming that individuals A and B receive positive experiences from tactile communication, X, the theory predicts that the individuals will strive toward balance and symmetry in this system by the establishment of positive interpersonal relationships with each other. The crucial question concerns whether social

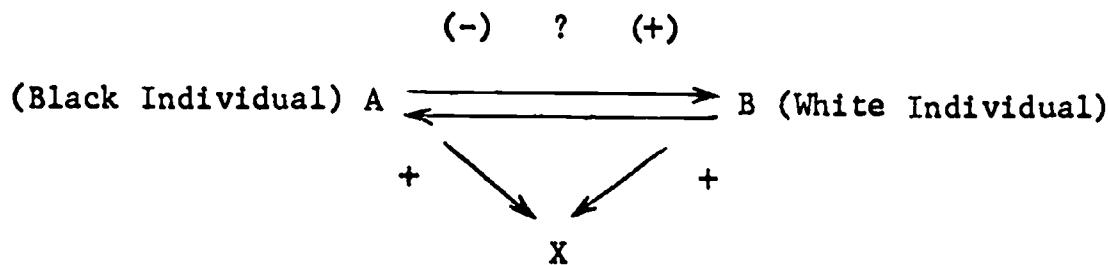
interaction through mutually perceived tactful experiences can occur between blacks and whites in an environment approved and prescribed by society.

During the past two decades, sport has been regarded by many as an institution of American life where the environment provides for the reduction of racial prejudice. The literature is replete with testimony that sport provides an arena where (1) recognition and reward are given without regard to race or class, providing for equalization of status (Educational Policies Commission, 1954; Schafer and Stehr, 1968); (2) team members strive toward accomplishment of shared tasks and attainment of shared goals (Loy, 1968; Metheny, 1969); (3) cooperation and dependency among teammates with regard to task and responsibility are inherent to the game situation (Cratty, 1967; Ulrich, 1968); and (4) society sanctions and even prescribes social interaction between blacks and whites (Schafer, 1968; Scott, 1971). In other words, sport lends itself to providing some of the necessary conditions deemed important by sociologists for the reduction of prejudice. And as already pointed out by Allport, when equalization of status, seeking of common goals, cooperative dependency among members, and interaction with the positive support of authorities, laws and customs are collectively operating, the conditions provide a feasible solution to the elimination of negative interpersonal relationships between blacks and whites caused by racial prejudice. Therefore, if negative interpersonal relationships between blacks and whites can be replaced by positive interpersonal relationships through social interaction, then the underlying racial attitude of prejudice can perhaps be altered.

The Problem

Statement of the problem. Newcomb's cognitive A-B-X model provides a theoretical base upon which the problem to be tested in this study is founded. Sport provides a common ground upon which shared codes of tactile experiences enable senders and receivers of messages to attach similar meanings to the same symbols. Assuming that two individuals (A and B), through these common experiences found in sport, develop positive attitudes toward tactile communication (X), the theory predicts that the two individuals will strive toward balance and symmetry by establishing positive interpersonal relationships with each other. More specifically, then, what effect does tactile communication in sport have on changes in interpersonal relationships between blacks and whites? A model representing this question is provided in Figure 4.

Figure 4
Schematic Representation
Of The Problem
(Interpersonal Relationships)



(Tactile Communication in Sport)

1. There is a statistically significant change in a positive direction in interpersonal relationships between black and white children who experience tactile communication in sport.¹

To test both aspects of this hypothesis statistically and empirically, sub-hypothesis 1A and sub-hypothesis 1B are stated:

1A. There is a statistically significant change in a positive direction in the interpersonal relationships of black children who experience tactile communication with white children in sport.

1B. There is a statistically significant change in a positive direction in the interpersonal relationships of white children who experience tactile communication with black children in sport.

Significance of the Study

There is a strong plea by physical educators for more research with respect to the social development of individuals as fostered in sport. The social development objective is widely quoted as being a major objective of physical education. Yet educators are far from successfully altering the complex behaviors found in interpersonal relationships between blacks and whites in our society. This study investigates the notion that sport provides an environment where social interaction (through tactile experiences) occurs on a cooperative and equal status basis sanctioned by society and is thus a medium for generating attitude change.

¹For the purpose of this study sport was defined as activities experienced by children in physical education.

CHAPTER II

RESEARCH METHODOLOGY

This study is primarily concerned with the processes that occur during encounters between individuals which influence interpersonal relationships. Chapter I discussed Newcomb's collective system of orientation as the theoretical base upon which this study was founded. Newcomb states the fundamental principle as follows:

Insofar as persons have similar attitudes toward things of importance to both or all of them, and discover that this is so, they have shared attitudes; under most conditions the experience of sharing such attitudes is rewarding, and thus provides a basis for mutual attraction (Newcomb, Turner, and Converse, 1965).

Since blacks and whites share similar experiences in sport, it was hypothesized that blacks and whites will develop positive interpersonal relationships through tactile communication in sport. The methodology used to test this hypothesis will now be discussed.

Design

The experimental design of this study is a variation of the classical pretest-posttest-control group design (see Figure 5). The groups

Figure 5
Research Design

R	Y_b	T	Y_a
	Y_b	C	Y_a
	Y_b	I	Y_a
	Y_b	X	Y_a

(1) were pretested by a sociometric rating scale to determine their interpersonal relationship status with other children (Y_b); (2) participated

in a six-week sports unit in which three treatments were manipulated; and (3) were posttested on the same sociometric rating scale (Y_a). The groups were assigned to treatments at random (using a table of random numbers).

The treatments of the groups were structured so that:

1. The Tactile group, T, participated in activities that required touching between two or more individuals. Cooperation is inherent in tactile activities;
2. The Cooperation group, C, participated in activities similar in nature to those in the Tactile group but excluded touch. Inclusion of this group into the design isolated the effects of touch from those of cooperation;
3. The Individual group, I, participated in activities similar in nature to both the Tactile group and the Cooperation group but excluded both touch and cooperation. Inclusion of this group into the design isolated the effects of touch and the effects of cooperation from routine individual participation in physical education; and
4. The Control group, X, received no formal instruction in physical education.

With the exception of the variables in question, an effort was made to structure the activities as nearly identical as possible for all three treatment groups. The daily lesson plans for the three groups are contained in Appendix A.

Consideration was given to selecting subjects from a population other than the school and the self-contained classroom setting to permit greater randomization, but the advantages to be gained by the present sampling plan seem to outweigh its limitations. This study is

aimed at the social interaction process and how it is fostered through sport in the school environment. The treatments were similar to routine educational activities, neither special nor separate from school life. The realism of the situation contributes to the external validity of this study.

In an attempt to validate the manipulation of tactile communication the actual incidents of tactile interaction were recorded between blacks and whites, blacks and blacks, and whites and whites as they participated in the six-week sports unit. Also, to help insure for validity of the manipulation, detailed lesson plans of the physical education activities were provided. A certified physical education instructor taught the various specified activities to the different groups as they appeared in the lesson plans. The utilization of a single teacher for all instruction eliminated teacher personality as an extraneous variable. Only upon completion of the six weeks of instruction was any specific information concerning the purpose of the various treatments disclosed to the physical education instructor. Also, because of the realism of these units it was not necessary to inform the subjects that they were participating in a research study. Thus, a "sensitization" known as the "Hawthorne Effect" was minimized.

Subjects

After reviewing literature concerning racial prejudice of young children, it was decided to use third grade children. Children of this age appear to possess racial awareness and racial preference, but have not as yet transformed these attitudes into permanent negative interpersonal relationships (Goodman, 1952; Stevenson and Stevenson, 1960).

Criswell (1937, 1939) and Moreno (1934) found that children of grades one, two and three play together without regard to race, children of grade four begin the withdrawal process, and children of grades five and six begin the formulation of racial cliques. Although subtle, more recent evidence seems to support the findings of Criswell and Moreno (Morland, 1958; Stevenson and Stewart, 1958; and Vaughn, 1964). This evidence suggests the possibility for establishing positive interpersonal relationships by the third grade level thus striving to alter the negative attitudes of prejudice.

A minimum of 192² third grade children representing eight self-contained classes from two integrated schools in the Memphis City Schools comprised the sample for this study. The criterion for the selection of each school was that it must contain at least four self-contained third grade classes, each of which were within a 60 percent - 40 percent racial ratio.

Measurement

Interpersonal relationships between black and white subjects were measured by a sociometric rating scale. The rating scale was a five point Likert-type measuring instrument that required the rater to assign the rated person to specified linearly ordered categories. The scale ranged in degrees of attraction from one (dislike very much) to five (like very much). All members of each class were listed on one sheet. To avoid a pattern ordered by race or by sex the names were listed on the sociometric rating scale pretest form in alphabetical order. The order was reversed on the posttest form. The subjects responded to the question, "Who do

²This number was selected for statistical purposes to permit an equal number (12) of scores per cell.

"you like?" by circling the number of his choice beside each person's name. An example of this instrument is depicted in Appendix B.

Procedures

In the course of a school year students are often asked by teachers to respond to questionnaires, opinion surveys, and attitude scales. The administrative procedures of the sociometric rating scale used in this study were neither unusual nor foreign to the teachers and students. Each teacher administered the pretest form of the sociometric rating scale on the day prior to the first day of the six-week unit. In an attempt to insure that instructions for all groups were identical, instructions were provided concerning administrative procedures of the rating scale (see Appendix B). It was emphasized that deviation from these instructions would affect the results. On the last day of treatment the teachers administered the posttest form of the same sociometric rating scale.

The physical education activities used during the six-week sports unit consisted of stunts and tumbling, rhythms, movement exploration, and games and relays applicable to the knowledge and skill level of third grade children. One week of participation included thirty minutes a day for four days. On the fifth day, and on one day a week prior to participation in this study, the children participated in an organized physical education program taught by an elementary physical education specialist. Although a limitation, since all children within one school were taught by the same specialist and received the same experiences, the previously planned physical education program one day a week was not viewed as seriously affecting the treatment of the other four days.

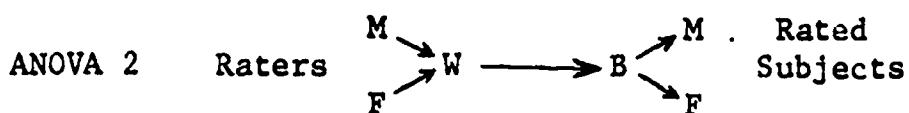
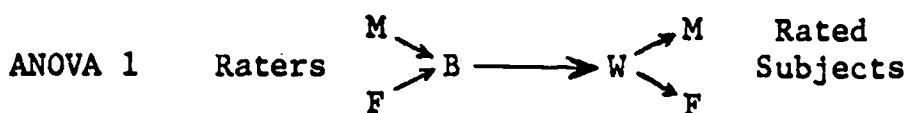
Statistical procedures

On the sociometric rating scale each response was weighted from one (dislike very much) to five (like very much). By subtracting the pretest rating of the sociometric scale from the posttest rating on the same scale, a difference score³ was obtained.

Two difference scores were obtained for each white subject: the mean pretest-posttest difference as rated by black males and by black females. These scores comprised the data for the blacks-rating-whites analysis of variance. Similarly, two scores were obtained for each black subject: the mean pretest-posttest difference as rated by white males and by white females. These scores comprised the data for the whites-rating-blacks analysis of variance (see Figure 6).

Figure 6

Analyses Of Variance By Race Perception



From the eight self-contained classes participating (four classes in each of two schools), the pretest-posttest difference scores of 235 children were utilized for statistical treatment as follows:

³Because of the complexity of the statistical design, difference scores were utilized to avoid the introduction of an additional factor to the analysis of variance design.

1. All subjects from the two schools comprising the Tactile group were combined into one group, T ($N_T = 60$).
2. A minimum of twelve black males, twelve black females, twelve white males, and twelve white females were randomly selected from the original 60 subjects (an even number of subjects in each cell was required for statistical computation).
3. The pretest-posttest difference scores of those 48 subjects represented the data for the Tactile group, T.
4. The same procedure was repeated for the Cooperation group, C ($N_C = 58$), the Individual group, I ($N_I = 59$), and the Control group, X ($N_X = 58$).

All subjects of racial origin other than white and black were excluded from the groups from which the subjects were randomly selected for statistical treatment. Similarly, data for all subjects who failed to participate in either the pretest or the posttest, or who were absent from class for a total elapsed time of more than five days during the six-week treatment period, were also excluded from statistical treatment.

Two separate group by subject-sex by rater-sex (4x2x2) multi-level factorial analyses of variance with repeated measures on sex of the rater were carried out to test the hypothesis of this study (see Figure 7). The criterion scores were determined for each subject by obtaining the mean pretest-posttest difference of the ratings by males and females of the subject's opposite race. Hence, rater-sex was the within factor and treatment and subject-sex were the two between factors of the design. The first analysis of variance was performed to examine the perceptions of blacks toward whites and the second analysis of variance was performed to examine the perceptions of whites toward blacks. If the experimental

treatment variable was found significant,⁴ it was intended to determine the relationship among the treatments by using Scheffe's method of linear contrasts as a post hoc procedure.

Figure 7
Example Of Multi-Level Factorial Analysis Of
Variance With Repeated Measures
(Black Rating White; White Rating Black)

	RATERS	
	M	F
Tactile	M	
	F	
Cooperation	M	
	F	
Individual	M	
	F	
Control	M	
	F	

⁴Throughout this study, the criterion level for significance was established at .05.

Chapter III

ANALYSIS OF THE DATA

This chapter, is concerned with the presentation of the findings yielded by this investigation. The initial discussion describes the pertinent information concerning the subjects and additional procedures involved in the study. The chapter closes with an in-depth discussion of the results of the statistical analyses utilized to test the hypothesis of this study.

Descriptive Data

Subjects. Subjects consisted of 235 elementary school children representing four self-contained third grade classes in two schools. The race by sex composition of each group in each school is provided in Table 1.

The scores of five subjects were excluded from the statistical analysis because they withdrew from school. In addition, the scores of twenty-two subjects were excluded because each child was absent for a total elapsed time of more than five days during the six-week treatment period. Thus, the scores of 208 subjects comprised the group eligible for statistical computation. From this total, twelve subjects were selected at random from each of the rater-groups (black males, black females, white males, and white females) to insure an even number of subjects in each analysis of variance cell. Therefore, the scores of

192 subjects were utilized. In order to meet the criterion of twelve subjects per cell, missing data for a total number of six subjects were supplied.⁵

Table 1
The Subjects
(School x Sex x Race x Treatment)

Group	BM	BF	WM	WF	B	%B	W	%W	Total
School 1									
Tactile	5	9	12	7	14 (42)		19 (58)		33
Cooperation	7	7	9	9	14 (44)		18 (56)		32
Individual	9	4	7	12	13 (41)		19 (59)		32
Control	6	8	11	8	14 (42)		19 (58)		33
School 2									
Tactile	10	5	5	7	15 (56)		12 (44)		27
Cooperation	6	9	7	4	15 (58)		11 (42)		26
Individual	3	11	9	4	14 (52)		13 (48)		27
Control	9	4	7	5	13 (52)		12 (48)		25

Validation of tactile communication. Incidents of tactile interaction were recorded between blacks and whites, blacks and blacks, and whites and whites in the three treatment groups as they participated in the six-week physical education instructional unit. The observations

⁵Because missing data were supplied, the degrees of freedom of the mean squares within for the blacks-rating-whites analysis of variance were reduced from the expected 88 degrees of freedom to 83 degrees of freedom. The degrees of freedom for the whites-rating-blacks analysis of variance were reduced from the expected 88 degrees of freedom to 87 degrees of freedom. The total number of missing observations was relatively small in comparison to the total number of observations.

covered a total of seven hours and thirty minutes distributed over five observation days with an average of thirty minutes of observation of each class per day. The results of the observations are provided in Table 2.

Table 2
Recorded Incidents of Tactile Interaction

Group	B-W	B-B	W-W	Total
Tactile	397	360	355	1112
Cooperation	44	54	39	137
Individual	61	51	55	167
Total	502	465	449	1416

A total of 1416 tactile interactions were recorded on the five observation days. The Tactile group yielded 78.5 percent of all tactile interaction occurring in the three treatment groups. Within the Tactile group, 35.7 percent of the interactions were found to involve black children interacting with white children, 32.2 percent involved black children interacting with other black children and 32 percent involved white children interacting with other white children.

Of the 1416 total tactile interactions, the Cooperation group comprised 9.7 percent and the Individual group comprised 11.8 percent. In other words, some incidents of tactile interaction occurred in the Cooperation group and the Individual group even though, by design of the lesson plans, tactile experiences were excluded. This finding advances the notion that tactile experiences naturally occur as children interact with one another in sport.

The validation procedures did not include the Control group. It was originally assumed that the absence of instruction by the certificated physical educator who instructed the other three treatment groups would constitute a legitimate control group. The desired control group would have isolated the effects of the three (physical education) treatment groups from the routine interaction between blacks and whites that normally occurs outside the realm of physical education. Therefore, validation appeared unnecessary.

However, while certified instruction was controlled for, participation in physical activities was not controlled for. In the place of the organized physical education afforded the children in the other treatment groups, the children in the Control group were allowed to play. Thus, the Control group actually served as a fourth treatment group: the "Recess" group. The treatment consisted of whatever children do in an unstructured free-play environment.

Testing of the Hypothesis

Blacks rating whites. The results of the analysis of variance performed on blacks rating whites are presented in Table 3. An F of 8.86 for treatment groups was statistically significant at the .001 level. Application of Scheffe's method for locating significant differences among means indicated that there were significant differences between the means of (1) the Tactile group ($\bar{X} = .309$) and the Individual group ($\bar{X} = .365$) at the .01 level of significance, (2) the Cooperation group ($\bar{X} = .277$) and the Individual group ($\bar{X} = .365$) at the .01 level of significance, and (3) the "Recess" group ($\bar{X} = .124$) and the Individual

Table 3
ANOVA Summary Of Blacks Rating Whites

Source	SS	df	MS	F	P
Groups	13.97	3	4.65	8.86	.001
S:Sex	5.01	1	5.01	9.53	.01
Group x S:Sex	6.30	3	2.10	3.99	.01
Between Error	43.62	83	.52		
R:Sex	.81	1	.81	1.34	
Group x R:Sex	4.01	3	1.33	2.21	
S:Sex x R:Sex	.67	1	.67	1.11	
Group x S:Sex x R:Sex	9.78	3	3.26	5.39	.01
Within Error	50.17	83	.60		
Total	134.36	181	.74		

group ($\bar{X} = .365$) at the .05 level of significance. The results of the Scheffe test for significance are shown in Table 4.

Table 4
Scheffe' Test For Significant Differences Among Means:
Blacks Rating Whites

	\bar{X}	I	X	C	T
	-.365		.124	.277	.309
Individual (I)	-.365	-	.489*	.642**	.674**
"Recess" (X)	.124		-	.153	.185
Cooperation (C)	.277			-	.032
Tactile (T)	.309				-

*significant at the .05 level

**significant at the .01 level

The blacks in the Tactile group, the Cooperation group, and the "Recess" group rated their white counterparts in the theoretically predicted (positive) direction, while the blacks in the Individual group rated whites in a negative direction (See Figure 8 contained in Appendix C).

Additional black-rating-white findings. The blacks-rating-whites analysis of variance also yielded significant effects at the .01 level for subject-sex ($F = 9.53$). Generally, the perceptions of blacks in the study toward white females in the study were more favorable after the six-week treatment period while the perceptions of blacks toward white males were slightly less favorable after the treatment. Therefore, it appears as though the white females being rated by blacks had a great overall positive influence on the difference scores. (See Figure 9 located in Appendix C).

The analysis of variance also indicated a statistically significant interaction at the .01 level for group by subject-sex ($F = 3.99$). Blacks rated white females more favorably in every group, the greatest positive gain occurring with tactile experiences. Comparably, blacks rated white males more favorably on the posttest in all groups with the exception of the Individual group (see Figure 10 in Appendix C).

The interaction for group by subject-sex by rater-sex reveals the F of 5.39 to be statistically significant at the .01 level. The perceptions of black females rating white females were more favorable than any other subject-sex/rater-sex combination. The perceptions of black males toward white males, black males toward white females and black females toward white males were all less favorable on the posttest after

participation in activities structured for the Individual group, while the perceptions of black females toward white females in the Individual group were more favorable on the posttest. These effects are graphically presented in Figure 11 contained in Appendix C.

Whites-rating-blacks. The results of the analysis of variance performed on whites rating blacks is presented in Table 5. An F of 2.98

Table 5

ANOVA Summary Of Whites Rating Blacks

Source	SS	df	MS	F	P
Groups	2.73	3	.91	2.98	.05
S:Sex	.00	1	.00		
Group x S:Sex	1.86	3	.62	2.03	
Between Error	26.60	87	.30		
R:Sex	.17	1	.17		
Group x R:Sex	.45	3	.15		
S:Sex x R:Sex	.00	1	.00		
Group x S:Sex x R:Sex	2.09	3	.69	2.80	.05
Within Error	21.64	87	.24		
Total	55.57	189	.29		

yielded statistically significant differences among the groups at the .05 level (see Figure 12 in Appendix C). Application of Scheffe's test for locating significance among means, however, indicated that there were no statistically significant differences among the means of any of the four groups. The Scheffe' statistical procedure was too conservative to detect a pattern of differences. Therefore, subsequent interactions must be examined. As a consequence of the statistical discrepancy, it must be concluded that the perceptions of whites toward blacks did not improve

significantly in any group after treatment. Means for the group variable are provided in Table 6.

Table 6

Scheffe' Test For Significant Differences Among Means:

Whites Rating Blacks

	C	I	T	X
\bar{X}	-.288	-.129	-.008	.012
Cooperation (C)	-.288	-.159	-.280	.300
Individual (I)	-.129	-	.121	.141
Tactile (T)	-.008	-	-	.020
"Recess" (X)	.012	-	-	-

Additional white-rating-black findings. The interaction of group by subject-sex by rater-sex discovered an F of 2.80 to be statistically significant at the .05 level. A significant increase in interpersonal attraction occurred only with black females as rated by white females in the Tactile group. A graphic representation of this interaction is depicted in Figure 13 located in Appendix C.

A one way analysis of variance was performed to test for a significant difference among the composite means of all blacks rating whites and all whites rating blacks. The results are provided in Table 7.

Table 7

ANOVA Summary of Difference Between Composite Means of
Blacks Rating Whites And Whites Rating Blacks

Source	SS	df	MS	F	P
Race	3.439	1	3.439	6.747	.01
Error	188.617	370	.509		
Total	192.057	371			

An F of 6.74 indicates a statistically significant difference at the .01 level between the means of the blacks' rating whites ($\bar{X} = .088$) and the whites rating blacks ($\bar{X} = -.105$). The positive mean of the blacks rating whites suggests a gain in attraction, while the mean of the whites rating blacks suggests a decrease in attraction. In other words, these results indicate that blacks perceived whites differently than whites perceived blacks after the experimental manipulation.

Summary

It was observed that the perceptions of blacks toward whites differ from the perceptions of whites toward blacks in the context of sport as defined by this study. Further, the treatments of the Tactile group, the Cooperation group, the Individual group and the "Recess" group may have had decided and differential effects on those perceptions. The evidence provided by this study supports sub-hypothesis 1A: There is a statistically significant change in a positive direction in the interpersonal relationships of black children who experience tactile communication with white children in sport. The change of the Tactile group was significant when compared to the change of the Individual group, however, rather than to the change of the "Recess" group as might be expected. The evidence provided by this study does not support sub-hypothesis 1B: There is a statistically significant change in a positive direction in the interpersonal relationships of white children who experience tactile communication with black children in sport.

Chapter IV

DISCUSSION

This chapter offers interpretation of some of the major findings revealed by this study. The initial discussion examines the differences in perception between black and white children that may affect their interpersonal relationships. The second section examines closely the changes in interpersonal relationships that occurred between black and white children as they participated in the various physical education activities.

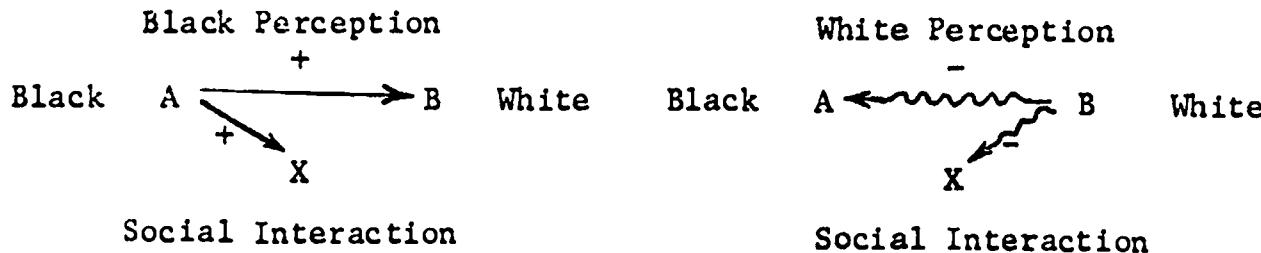
Perceptions According to Race

When two persons encounter each other, each brings to the situation a reinforcement history and a behavior repertoire (socio-cultural background, et cetera) which predisposes them to certain patterns of communication and orientation. These socio-cultural influences may account for the apparent disproportionate racial perceptions existing between blacks and whites participating in this study. Generally, the blacks rated whites more favorably after treatment while the whites rated blacks less favorably after treatment.

Figure 14 represents two individual A-B-X systems of orientation as delineated by the results of this study. Each of the individual systems is symmetrical, although the orientation of blacks toward whites is in a positive direction and the orientation of whites toward blacks is

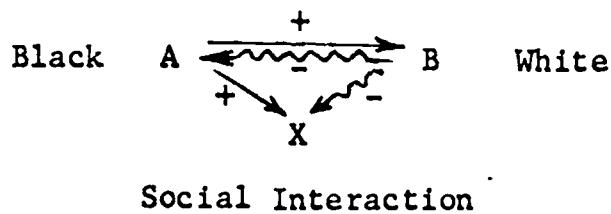
in a negative direction. However, when the two individual systems of orientation between blacks and whites are combined to form a collective

Figure 14
Individual Systems of Orientation
During Social Interaction



system of orientation, dissonance is created (see Figure 15). This figure probably provides an accurate description of the dissonance that often occurs during social interaction between blacks and whites in our society.

Figure 15
Asymmetrical A-B-X Model Of
Orientation (Collective)



The socio-cultural awareness of other races emerges in individuals at the very early age of three or four years. Thus, during the first few years of life, the child has an awareness of racial distinctions and of favorable or unfavorable social attitudes toward that racial membership. Research tends to confirm that the perceptions of black children toward white children are more favorable than the perceptions of white children toward black children (Goodman, 1952; Morland, 1962; Clark and Clark, 1947; Radke, Trager, and Davis, 1949; Landreth and Johnson, 1953; and

Stevenson and Stewart, 1958). Generally, the findings of this study concur. The various physical education activities had a more favorable influence upon the attitudes of blacks toward whites than they did upon the attitudes of whites toward blacks.

Perceptions According to Group

The Tactile group. The primary hypothesis of this study which stated that there is a statistically significant change in a positive direction in interpersonal relationships between black and white children who experience tactile communication in sport, was not supported in its entirety. The original notion was based on Newcomb's collective system of orientation in which individuals mutually perceive an attitude object (tactile experiences in sport) and "coorient" their attitudes toward each other. There was some evidence that did support Newcomb's individual system of orientation. Black children established positive attitudes toward white children after receiving tactile experiences in physical education.

No such positive gain was observed in the individual system of orientation of whites perceiving blacks after participation in tactile physical education experiences. Perhaps the attitudes of prejudice existing for whites toward blacks is different than for blacks toward whites. It is conceivable that the amount of time necessary to alter prejudice differs accordingly. Perhaps the pressures of society affect the formulation of positive interpersonal relationships of whites differently than blacks. Perhaps touching has different connotations for blacks than it does for whites. Finally, blacks may view the meaning of sport differently than whites. These notions suggests interesting areas for further inquiry.

The Cooperation group. The blacks in the Cooperation group rated whites in a (positive) direction similar to the ratings observed in the Tactile group. This occurred even though, by design of the lesson plans, touch was excluded from the activities experienced by the Cooperation group. Thus, because cooperation was inherent in the tactile activities, it appears that, for blacks rating whites, cooperative experiences in sport have essentially the same effects as tactile experiences in sport. Cooperation between two persons, like tactile experiences, can be a form of communication thus serving as a basis for mutual attraction. These findings suggest a tenable alternate hypothesis: The perceptions of black children toward white children will change in a positive direction as they experience cooperative activities in sport.

On the other hand, it is also true that interracial contact in a "cooperative" setting does not always demonstrate a reduction in prejudice. Consequently, an individual can establish negative attitudes toward cooperation with an individual. This, possibly, is what occurred in the Cooperation group as whites rated blacks in a negative direction. The forces of prejudice (or other variables) appear to be for whites toward blacks more powerful in determining interpersonal relationships than six weeks of interracial participation in cooperative activities.

The Individual group. The black and white children of the Individual group participated in activities excluding touch and cooperation, thus perpetuating a competitive environment of "every man for himself." This type of environment perhaps eliminated the very basis for mutual attraction that was provided in the Tactile group and the Cooperation group. If competition was perceived by the children to result in

conflict, then according to the premise of Newcomb's A-B-X system of orientation, conditions were created to exert a force toward the development of unfavorable attitudes between individuals. Both black and white children rated those of the opposite race less favorably after participating in activities designed for the Individual group. In sum, the type of environment created by individual participation in physical education, excluding touch and cooperation, may influence interpersonal relationships in a negative direction. That is not to say that participation in individual physical education activities is not desirable. It is to say, however, that the evidence strongly suggests that participation in individual physical education activities may be detrimental when the objectives of such participation are social in nature. The practical ramifications for the elementary physical education teacher should be self-evident.

. The "Recess" group. As mentioned previously, the Control group did not control for tactile, cooperation, and individual-type experiences. Rather, the environment of the "Recess" group permitted the children to choose to indulge in or to avoid tactile and/or cooperative interactions with children of the opposite race. In the "Recess" group, the ratings of blacks toward whites were slightly more favorable after the treatment period while the ratings of whites toward blacks were essentially the same. It is conceivable that the relatively unstructured recreational free play environment offers the best solution for blacks and whites to gain mutual acceptance in sport participation. The evidence representing the other treatment groups suggests that after participation, blacks will

perceive whites more favorably, but whites will perceive blacks less favorably.

While interpersonal perceptions by sex were not explored extensively in this study, an interesting pattern was observed with the ratings of females and deserves mention before moving on to Chapter V. It is believed that different socio-cultural perceptions influencing social interaction exist differently for males than for females. Baxter (1970) suggests that sex operates as a determinant of interaction and females interact more intimately than males. Sommer (1959) attempted to determine the way people arrange themselves when they desire to interact. He found that females will sit closer to other females than to males. This indicates a cultural pattern that, at least when interacting with members of the same sex, females tend to exhibit "closer" behavior than males. This inferred cultural pattern can offer a credible explanation for females in all groups rating other females slightly higher than was observed in the ratings of the males. If females perceived "close" association (particularly in the Tactile and the Cooperation groups) as desirable, then it follows that their ratings might be more favorable.

The final chapter will summarize the study and offer recommendations for further research.

Chapter V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

This investigation has systematically extended the theoretical framework of Newcomb's A-B-X system of orientation into the area of social interaction. Specifically, inquiry was made to determine the social effects of tactile communication between black and white children in a culturally approved setting of sport. Tactile communication was introduced in this study as a nonverbal means of orientation providing a basis for mutual attraction between individuals. Sport was assumed to be an institution of American life where it is possible for the environment to provide for the reduction of racial prejudice between blacks and whites. Further, sport in this particular study was defined as those activities experienced by children in a carefully prescribed physical education program.

It was the intention of this study to provide a situation in the physical education environment whereby positive interpersonal relationships could be formulated between black and white children. The hypothesis stated that there is a statistically significant change in a positive direction in the interpersonal relationships between black and white children who experience tactile communication in sport. The hypothesis was tested empirically in two parts. One sub-hypothesis (1A) stated that there is a statistically significant change in a positive direction in the interpersonal relationships of black children who

experience tactile communication with white children in sport. The second sub-hypothesis (1B) stated that there is a statistically significant change in a positive direction in the interpersonal relationships of white children who experience tactile communication with black children in sport.

The experimental design of this study consisted of three treatment groups and one control group. The first treatment group emphasized tactile experiences in physical education; the second group emphasized cooperative physical education activities but did not include tactile experiences; the third group involved individual participation but did not include tactile or cooperative experiences; and the fourth group served as the Control group: no structured program in physical education. However, it was learned after the data were collected that the control group actually participated in tactile, cooperation, and individual activities during recess. Hence, the fourth group became a treatment: experiences of children during recess.

Subjects consisted of 235 elementary school children representing four integrated self-contained third grade classes in two schools. The children were pretested by a sociometric rating scale to determine their interpersonal relationship status with other children. They then participated in a six-week sports unit in which tactile experiences, cooperative experiences and individual participation were manipulated. They were then posttested on the same sociometric scale. The sociometric scale was a Likert-type measuring instrument with weighted values ranging from one (dislike very much) to five (like very much).

Two separate group by subject-sex by rater-sex ($4 \times 2 \times 2$) analyses of variance with repeated measures on sex of the rater were calculated

to test the hypothesis. One analysis of variance examined the perceptions of black children toward white children and the other examined the perceptions of white children toward black children.

Conclusions

It was found that blacks participating in the Tactile group, the Cooperation group and the "Recess" group rated whites more favorably on the posttest than on the pretest. In addition, it was found that blacks who participated in the activities of the Individual group rated whites less favorably on the posttest. The mean scores were subjected to Scheffe's test for locating significant differences among means. No statistically significant difference was reported among the Tactile group, the Cooperation group and the "Recess" group. However, statistically significant differences were found between the Individual group and the Tactile group (.01), the Individual group and the Cooperation group (.01), and the Individual group and the "Recess" group (.05). Sub-hypothesis 1A, stating that there is a statistically significant change in a positive direction in interpersonal relationships of black children who experience tactile communication with white children in sport, was supported according to the evidence.

The whites-rating-blacks analysis of variance revealed that white children did not rate black children more favorably after the treatments as predicted. Scheffe's test for locating significant differences among means yielded no statistically significant differences among the Tactile group, the Cooperation group, the Individual group, and the "Recess" group. Consequently, sub-hypothesis 1B, stating that there is a statistically significant change in a positive direction in

interpersonal relationships of white children who experience tactile communication with black children in sport, was not supported according to the evidence provided by the data. Following is a summary of the results of the main effects and interactions:

1. Statistically significant difference was found for blacks rating whites when the Individual group was compared to the Tactile group, the Cooperation group, and the "Recess" group. However, no statistically significant differences were revealed among the Tactile group, the Cooperation group, and the "Recess" group (sub-hypothesis 1A).

2. No statistically significant differences were revealed among the Tactile group, the Cooperation group, the Individual group and the "Recess" group for whites rating blacks (sub-hypothesis 1B).

3. The treatment of the Tactile group, the Cooperation group, and the "Recess" group had a favorable effect on changes in interpersonal relationships of blacks rating whites, that is, the changes were in the theoretically predicted (positive) direction.

4. The treatment of the Individual group had an unfavorable effect on changes in interpersonal relationships of blacks rating whites, that is, the changes were in a negative direction.

5. A positive change for white males as rated by blacks occurred in all groups with the exception of the Individual group where a negative change occurred.

6. The only significant positive rating of blacks by whites was observed in the ratings of black females by white females after participating in activities designed for the Tactile group.

7. In all groups white females rated by blacks enjoyed a positive change. The greatest gain, however, was observed in the ratings of black females toward white females.

8. Generally, blacks rated whites more favorably after treatment; whites rated blacks less favorably after treatment.

Recommendations

Questions generated by this study concerning psychological and sociological background factors influencing interpersonal relationships implicate viable areas of needed research. This study should be replicated with modifications controlling for these psychological and socio-logical influences.

First, it is recommended that this study be replicated in a community where racial integration of schools has been in existence for several years. The two (white) schools involved in this study had been desegregated by court-ordered busing for a period of only four months prior to this research. For most children participating in this experiment, busing brought about the initial contact with children of the opposite race in an educational setting. At this point in time, parental and community attitudes may have affected the social perceptions of these children. Research indicates that perhaps children would be more "susceptible" to the formulation of positive interpersonal relationships through the experiences found in sport in communities where integration is familiar (Horowitz, 1936; Singer, 1964).

In addition, the desegregation process brought about by busing may create certain psychological conditions for the black children and for the white children. Are bused children perceived as intruders to the new school? Do black children bused into a white school search for acceptance by attempting to establish positive interpersonal relationships with white children? Do white children bused into a black school

search for acceptance by blacks? Perhaps being a member of the majority group or the minority group influences the formulation of interpersonal relationships. This notion leads to a second set of questions: Are there differences between blacks and whites in personality subcultures that produce a greater tendency to conform among black children? Do black and white children respond to sociometric rating scales according to social expectation? Is there a one-to-one correspondence between reported attitudes and observed behavior of third grade children? These questions suggest possible areas for further study.

Second, it is recommended that the effects of the manipulated treatment be studied over time. Racial attitudes are neither simple nor ephemeral response tendencies. Perhaps participation in the different experimental treatments over the period of a year would produce changes in interpersonal relationships or racial attitudes not revealed by this study within the short period of six weeks. Perhaps tactile experiences, cooperative experiences, individual participation, or recess would emerge as a fresh solution toward altering negative interpersonal relationships caused by racial prejudice. A periodic evaluation of interpersonal relationships throughout the year may begin to unveil patterns of attitude change that take place during social interaction between black and white children.

Third, it seems worthwhile to consider several factors as possible determinants in the formulation of interpersonal relationships. Socio-economic status may have an effect on the social perceptions of children. The physical prowess and skill ability, or lack of them, demonstrated by an individual in the setting of sport may affect how

others perceive him. Unique physiological, psychological, and socio-logical characteristics of third grade children may limit generalizations of the results of this study to other age groups. Individual teachers may have an effect on generating a "positive" or "negative" social atmosphere within the classroom. Perhaps females perceive females differently than males perceive males and the connotations of touch may differ accordingly. In the interest of achieving a comprehensive body of knowledge these uncertainties should be reduced by further research efforts. Finally, more investigation should be conducted with the effects of change-producing procedures attempting to create positive interpersonal relationships between blacks and whites thus striving to alter the underlying negative attitude of prejudice existing in our society.

BIBLIOGRAPHY

Allport, G. W. The nature of prejudice. New York: Doubleday, 1958.

Baxter, J. Interpersonal spacing in natural settings. Sociometry, 1970, 33, 444-456.

Bird, C., Monachesi, E. D., and Burdick, H. Infiltration and the attitudes of white and Negro parents and children. Journal of Abnormal and Social Psychology, 1952, 47, 695-696.

Boyle, R. Sports: mirror of American life. Boston: Little, Brown and Co., 1953.

Clark, K. B. and Clark, M. P. Racial identification and preference in Negro children. In T. M. Newcomb and E. L. Hartley (Eds.), Readings in social psychology. New York: Holt, 1947, 169-178.

Cook, S. The role of social values in social-psychological research. Research Center for Human Relations, New York University, 1949.

Cozens, F. and Stumpf, F. Sports in American Life. Chicago: University of Chicago Press, 1953.

Cratty, B. Social dimensions of physical activity. Englewood Cliffs, N. J.: Prentice-Hall, 1972.

Deutsch, M. and Collins, M. Interracial housing: a psychological evaluation of a social experiment. University of Minnesota, 1951.

Educational Policies Commission. School Athletics: Problems and policies, Washington, D. C., 1954.

Festinger, L., Schachter, H., and Back, S. Theory and experiment in social communication. Ann Arbor: Institute for Social Research, 1950.

Frank, L. Genetic psychology monographs, 56, 1957.

Goffman, E. Behavior in public places. New York: Free Press, 1959.

Goodman, M. Race awareness in young children. London: Collier-MacMillan, 1952.

Hall, E. The silent language. New York: Doubleday, 1959.

Halpin, A. Muted language. School Review, 1960, 68, 85-104.

Hogrefe, R., Evans, M., and Chein, I. The effects on intergroup attitudes of participation in an interracial play center. American Psychologist, 1947, 2, 324. (Abstract).

Horowitz, E. L. The development of attitudes toward the Negro. Archives of Psychology, New York, 1936, 194.

Kephart, W. Racial factors and urban law enforcement. Philadelphia: University of Pennsylvania Press, 1957.

Kerckhoff, R. K. and Gould, F. A study of children's sense of community. Merrill-Palmer Institute, 1961.

Krout, M. Introduction to social psychology. New York: Harper, 1942.

Landreth, C. and Johnson, B. C. Young children's responses to a picture and inset test designed to reveal reactions to persons of different skin color. Child Development, 1953, 24, 63-79.

Locke, L. F. Research in physical education. New York: Teachers College (Columbia University) Press, 1969.

MacKenzie, B. The importance of contact in determining attitudes toward Negroes. Journal of Abnormal and Social Psychology, 1948, 43, 417-441.

Mannheimer, D. Opinions about Negro infantry platoons in white companies of seven divisions. Information and Education Division, U. S. Department of War, 1945.

Moreno, J. Who shall survive? Washington, D. C.: Nervous and Mental Disease Publishing Co., 1934.

Morland, J. Racial recognition by nursery school children in Lynchberg, Virginia. Social Forces, 1958, 37, 132-137.

Morland, J. Racial acceptance and preference of nursery school children in a Southern city. Merrill-Palmer Quarterly, 1962, 8, 271-280.

Mussen, P. H. Some personality and social factors related to changes in children's attitudes toward Negroes. Journal of Abnormal Social Psychology, 1950, 45, 423-441.

Newcomb, T. Social psychology. New York: Holt, Rinehart, and Winston, 1961.

Newcomb, T. The acquaintance process. New York: Holt, Rinehart and Winston, 1961.

Newcomb, T., Turner, R., and Converse, P. Social psychology: the study of human interaction. New York: Holt, Rinehart, and Winston, 1965.

Radke, M. Trager, H. and Davis, H. Social perceptions and attitudes of children. Genetic Psychological Monographs, 1949, 40, 327-447.

Schafer, W. and Stehr, N. Participation in competitive athletics and social mobility: some intervening social processes. Paper presented at the bi-annual meetings of the International Committee on Sociology of Sport, Vienna, 1968.

Schafer, W. Some social sources and consequences of interscholastic athletics: the case of participation and delinquency. Sociology of Sport, Proceedings of C.I.C. Symposium on the Sociology of Sport, 1968.

Scott, J. The athletic revolution. New York: The Free Press, 1971.

Sherif, M. Superordinate goals in the reduction of intergroup conflicts. American Journal of Sociology, 1958, 63, 349-356.

Singer, D. The impact of interracial classroom exposure on the social attitudes of fifth grade children. Unpublished study, 1964.

Sommer, R. Studies in personal space. Sociometry, 1959, 22, 248.

Stevenson, H. W. and Stewart, E. C. A developmental study of race awareness in young children. Child Development, 1958, 29, 399-410.

Stouffer, S., Suchman, E., DeVinney, L., Star, S., and Williams, R. Studies in social psychology in World War II. The American Soldier Adjustment During Army Life. New York: Princeton University Press, 1948.

Ulrich, C. Stranger next door: ethnic relations in American communities. Englewood Cliffs, N. J.: Prentice-Hall, 1964.

Wilner, D., Walkley, R., and Cook, S. Human relations in interracial housing: a study of the contact hypothesis. Minnesota: University of Minnesota Press, 1955.

Yarrow, M. R. Interpersonal dynamics of a desegregation process. Journal of Social Issues, 1958, 14, No. 1.

APPENDIX A

LESSON PLANS

TACTILE GROUP (X_1)

WEEK ONE

DAY ONE

Activity: Rainy Day Activity

Title: Poor Pussy Cat

Directions: One child is chosen to be It and all others are seated. It walks around stroking players on the hands saying "poor pussy cat." He decides upon a player that he wants to chase him and he gives that player a slap and says, "Scat!" He then attempts to run to a goal before the chaser can tag him. The goal may be a blackboard, a book, etc.

Activity: Classroom Games

Title: Eraser Shuttle

Directions: Have teams arranged in partners. On signal partners "race" to the blackboard by placing their heels and toes in rapid succession in front of each other. Their hands are joined. Each picks up an eraser as they reach the board. They return to their own team to give the erasers to the next pair. The next set repeat the same action except they replace the erasers for the third set to pick up.

DAY TWO

Activity: Rhythms

Title: Bingo

Directions: Double circle of partners facing CCW.
WORDS:

"A BIG BLACK DOG SAT ON THE BACK PORCH,
AND BINGO WAS HIS NAME.
A BIG BLACK DOG SAT ON THE BACK PORCH,
AND BINGO WAS HIS NAME."

All skip CCW
around the circle
with partner,
holding hands.

"B - I - N - G - O
B - I - N - G - O
B - I - N - G - O
AND BINGO WAS HIS NAME."

Everyone form a
large circle and
continue walking.

"B - I - N - G - O"

Scatter to find
a partner and
return to ori-
ginal formation.

Activity: Classroom Games

Title: Forty Ways to Get There

Directions: Partners move across the front of the room by helping each other in any way they wish. Any novel way of moving is acceptable.

DAY THREE

Activity: Team Tag

Title: Crows and Cranes

Directions: T. . players are divided into two teams, one the crows and the other the cranes. The players of both teams are lined up across the play area contacting their team's starting line. Within each team the players run in pairs holding hands. The teacher stands at one end of the two lines of players and calls either "Crows!" or "Cranes!" If she calls "Crows!" the crows run and are chased by a pair of cranes. If a pair of crows are tagged before they reach safety behind their own goal line, they become cranes. The cranes are chased by the crows when the teacher calls "Cranes!" The team having the most players at the end of the playing period is the winner.

Suggestion: Have the children find a new partner after each run to the safety line.

DAY FOUR

Activity: Running

Title: Loose Caboose

Directions: Players are in sets of three, one behind the other and holding onto shoulders to form a train with engine in front, passenger car in middle, and caboose in back. Use one or several loose cabooses who try to hook onto train at the back--thus making the engine of that train a loose caboose.

WEEK TWO

DAY ONE

Activity: Running**Title:** Squirrels in Trees

Directions: The players are divided into groups of three and the players in each group are numbered "one," "two" and "three." Numbers "one" and "two" joins hands to form a tree; number "three" is the squirrel and he stands in the tree formed by the other two players. The groups of three are scattered over the play area. There should be one or more extra squirrels without a tree. The teacher calls, "Squirrels run!" This is the signal for the squirrels to run from their tree to another tree, and while they attempt to get into a tree, the extra squirrels are finding a tree. Only one squirrel is allowed in a tree and someone is always left without a tree with each change. As soon as all of the trees are full, the signal is repeated and the game continues.

DAY TWO

Activity: Jumping**Title:** Jump the Shot

Directions: Partners stand in a circle facing center. One player holding a rope kneels in the center of the circle as he turns the jump rope, playing it out to its full length. The partners must jump over it. Any player who touches the rope with his feet while it is turning is "out" and must wait until someone else misses before having another turn.

Suggestion: A. Three "outs" and that player becomes the rope turner
B. Partners: hold hands facing each other, hold one hand only, hold waist and shoulders, try a set of three, etc.

DAY THREE

Activity: Movement Exploration**Title:** Here to There

Directions: Two lines from 10-15 feet apart. One group on each line, facing each other. Children may be asked to see how many ways they can get from one line to the other by helping a partner. Backward ways . . . hopping ways . . . turning ways . . . jumping ways, etc., in their low, middle and high levels.

Suggestions:

- A. Use different body parts--hook elbows, hold someone's foot, place hands on shoulders, etc.
- B. Change partners after crossing line
- C. Try a set of three or four people
- D. Find ways to carry partners

DAY FOUR

Activity: Movement Exploration

Title: Vis-a-vis

Directions: The formation of the class is scattered with partners. If the teacher (or extra student) calls "back to back" or "hand to foot" or "elbow to knee," the children do as directed. If the cue "busy bee" is called, everyone, including the extra child, must find a new partner. The child who fails to get a new partner becomes the extra player and new caller.

Suggestions:

- elbow to elbow
- shoulder to shoulder
- elbow to shoulder
- head to hand
- hand to hand
- knee to knee
- hand to back
- head to back
- foot to foot
- wrist to ankle
- elbow to neck
- toe to toe
- finger to finger
- wrist to ear
- finger to nose
- etc.

WEEK THREE

DAY ONE

Activity: Running

Title: Back-to-Back

Directions: The players are arranged in couples. Partners stand back to back with elbows linked. One extra player does not have a partner. Upon a signal from the teacher, all players change partners while the extra player attempts to get a partner. One player will be left without a partner each time. The game is repeated with the player who is left giving the signal for the next change.

Suggestion: The game may be played with two extra players.

DAY TWO**Activity:** Running**Title:** Defrost

Directions: Choose five taggers with identifying trait: wearing red, wearing jeans, blond boys, wearing headbands, etc. Choose two defrosters who are fast runners. The taggers, after counting aloud to five in a football huddle, start the chase. Tagged players freeze and stay frozen. The spice of the game is that the two defrosters may unfreeze any player; as he does so, he shouts, "Defrost!" Defrosters may also be frozen by taggers. So as not to confuse a frozen player with an untagged one, have untagged players walk rather than stand when they tire.

DAY THREE**Activity:** Running**Title:** Trio Race

Directions: Two lines approximately 30 feet apart. One set of three children will race another set of three by running while holding hands from the starting line to the finish line. After the entire class has run, the children find a new trio by the time the teacher counts to ten.

Suggestion: Use a different locomotor pattern (skipping, turning, etc.) and repeat.

DAY FOUR**Activity:** Team-Relay**Title:** Rescue Relay

Directions: The teams are in relay formation behind the starting line, One player of each team is standing on the goal line and facing his team. On signal, this player runs to the first player in his team, grasps his hand and returns to the goal line with his teammate. He remains there while the player he rescued returns to rescue another teammate. Thus, each player is taken to the goal line and returns to get the next player until all players have been rescued and are in file formation behind the goal line. The first team who completes this file wins the relay.

WEEK FOUR

DAY ONE

Activity: Team Game

Title: Animal Trap

Directions: One half of the class forms a circle; the other half scatter outside the circle. Circle players join hands. On the signal from the teacher, the "animals" run in and out of the "trap." When the teacher claps her hands the trap is closed. All animals caught inside join the circle. After all animals have been caught, change positions and start a new game.

DAY TWO

Activity: Stunts and Tumbling

Title: Skin the Snake

Directions: Each player extends his left hand backward between his legs and grasps the right hand of the player behind him. On signal every member of the file except the last player starts moving backward. As the backward movement commences, the last player lies down on his back but holds on to the player in front. The second rear player, after passing over the last players, lies down but still maintains a hold. Continue this pattern until everyone is lying down. As soon as everyone is on their backs, the one at the rear stands, moves forward pulling the second player to his feet. Continue this pattern until everyone is standing.

DAY THREE

Activity: Tag

Title: Cut the Cake

Directions: Single circle facing center with one player in center. One child is chosen to be It and stands in the middle. Circle players join hands and It raises his hands over head representing a knife. The "knife" brings his hands down gently over the joined hands of two circle players (cuts the cake). The two circle players must run in opposite directions around the circle. It remains in the same spot to determine who gets back first. The first child back becomes the new "knife" and the game starts over.

Suggestion: Have several "cakes."

DAY FOUR**Activity:** Movement Exploration**Title:** Locomotor Movements**Directions:** Partners place one jump rope on the floor in a straight line.

- a. Jump with partner across rope in a zig-zag pattern
- b. Hop across
- c. Slide length of rope using open-close movements with feet, one person on each side of the rope
- d. Gallop length of the rope in a similar manner

WEEK FIVE**DAY ONE****Activity:** Team Relay**Title:** Man Hunt**Directions:** The teams are in relay formation behind the starting line; one player of each team is standing on the goal line facing his team. The teacher gives commands to touch certain parts of the player standing on the goal line, for example, "SHOE!" The first person in line runs to touch the shoe of his own team member and then returns to the file formation at the end of the line. The second player may have a different command.**DAY TWO****Activity:** Team Relay**Title:** Variation of Man Hunt**Directions:** The players stand in a relay formation holding hands; each file represents a team. The teacher gives commands to touch colors, materials, etc. All players respond to the command and return to their original positions within his own file. The team that returns to the formation first with every member holding hands, scores one point.**Suggestions:** Commands given might be such as touch brick, touch red, touch metal, etc.

DAY THREE**Activity:** Tag /**Title:** Squeeze-Oh!

Directions: The players stand in a line with their back toward the goal with hands joined behind their backs. One child, selected to be It, stands facing the line of players, and about ten feet from them, waiting to chase them to the goal. The first child in the line squeezes the hand of his neighbor as he calls, "Squeeze!" The squeeze is passed on from player to player until it reaches the child at the opposite end of the line. The last child, after receiving the squeeze, calls, "OH!" This is the signal for players to drop hands and run to the goal line. It tries to tag the players before they reach the goal line. The first child whom he tags becomes It. Repeat.

DAY FOUR**Activity:** Team Relay**Title:** File Relay

Directions: Teams are in relay formation. Each player places his hands on the hips of the player just ahead of him. At the signal the whole file runs to the goal line and back. The first team to return to their original position wins.

WEEK SIX**DAY ONE****Activity:** Ball Handling**Title:** Crown the King

Directions: One player, the king, stands or sits in the center of a circle approximately 15 feet in diameter. Five to six players form a circle around the king. They hold hands and face toward the outside of the circle in order to protect the king. The other players are outside the circle. They attempt to crown, or hit, the king with a playground ball. When a player crowns the king, he becomes the king and the king becomes a guard. The guard becomes one of the other players in the outside circle.

Suggestion: The guards may not let go of their hands while attempting to protect the king. For maximum participation, allow two or more games to be played consecutively.

DAY TWO**Activity:** Team Relay**Title:** Dressed the Best

Directions: The players are arranged in three or four teams behind a starting line as in a simple relay. The teams are in pairs. The first two players in each team run to the goal line with their partner. They carry with them an elastic band. When they reach the "dressing room" they both get dressed by slipping the elastic band over their heads at the same time. When they have stepped through, they run back to their own team carrying the elastic band for the next couple. Play continues until all have "dressed."

DAY THREE**Activity:** Movement Exploration**Title:** Movement Exploration

Directions: The class is arranged in couples face to face as if looking in a mirror. The palms of the hands are touching. The two children will decide who will be the leader and who will be the image. The leader then must make movements which the image must follow. The teacher gives a signal to find a new partner or to switch roles of being either the leader or the image.

DAY FOUR**Activity:** Running**Title:** Slap Jack

Directions: The players stand in a circle formation facing outward. One child, who is selected to be It, runs around the outside of the circle shaking everyone's hand until he decides to slap a person's hand instead of shaking it. He runs around the circle while the slapped player runs in the opposite direction. Both players try to get back to the vacant place in the circle first. The one who fails to reach the vacant place first is It and the game is repeated.

Suggestion: Have three or more circles operating at the same time.

COOPERATION GROUP (X_2)

WEEK ONE

DAY ONE

Activity: Classroom games

Title: Poor Pussy Cat

Directions: One child is chosen to be It and all others are seated. It walks around saying "Poor Pussy Cat." He decides upon a player that he wants to him and to that player, "Scat!" He attempts to run to a goal before the chaser can tag him. The goal may be a blackboard, a book, etc.

Activity: Classroom Games

Title: Eraser Shuttle

Directions: Have teams arranged in partners. On signal partners "race" to the blackboard by placing their heels and toes in rapid succession in front of each other. Their hands are not joined. Each picks up an eraser as they reach the board. They return to their own team to give the erasers to the next set of partners. The next set repeat the same action except they replace the erasers. As they return the third set of partners will go to pick up the erasers again.

DAY TWO

Activity: Rhythms

Title: Bingo

Directions: Double circle of partners facing counterclockwise.

WORDS:

"A BIG BLACK DOG SAT ON THE BACK PORCH,
AND BINGO WAS HIS NAME.
A BIG BLACK DOG SAT ON THE BACK PORCH,
AND BINGO WAS HIS NAME."

All skip counter-clockwise with partner.

"B - I - N - G - O
B - I - N - G - O
B - I - N - G - O
AND BINGO WAS HIS NAME."

" B - I - N - G - O."

Everyone form large single circle and continue walking, around circle.

Limitation: do not touch partner.

Scatter to find a new partner and return to original formation to begin again.

Activity: Classroom Games

Title: Forty Ways to Get There

Directions: Partners move across the room together in any fashion that they wish. They may not touch each other.

DAY THREE

Activity: Team Tag

Title: Crows and Cranes

Directions: The players are divided into two teams, one the crows and the other the cranes. The players of both teams are lined up contacting their starting line. The players of both teams choose a partner who they wish to outrun. If the teacher calls "Crows!" the crows run toward their goal line while the cranes try to outrun their chosen partner. If the crane outruns the crow, then the crow must become a crane. The cranes are chased by the crows when the teacher calls "Cranes!" The team which has more players at the end of the game is the winner.

DAY FOUR

Activity: Running

Title: Loose Caboose

Directions: Players are in sets of three or four. The first in each line is the leader. The people (train) behind him must follow the leader by repeating his actions. When the teacher calls "Loose Caboose!" the leader of each train must run to the end of some other train, thus becoming the Caboose. The new leader is the second in line.

WEEK TWO

DAY ONE

Activity: Running

Title: Squirrels in Trees

Directions: The players are divided into groups of three and the players in each group are numbered "one," "two," and "three." Numbers "one" and "two" hold outstretched arms to form a tree (do not hold hands or touch); number "three" is the squirrel and he stands in the hollow tree formed by the

the other two players. The groups of three are scattered over the play area. There should be one or more extra squirrels without a tree. The teacher calls, "Squirrels Run!" This is the signal for the squirrels to run from their tree to another tree, and while they are changing to another tree the extra squirrels attempt to get into a tree. Only one squirrel is allowed in a tree and someone is always left without a tree with each change. As soon as all of the trees are full the signal is repeated and the game continues.

DAY TWO

Activity: Jumping

Title: Jump the Shot

Directions: Partners stand in a circle facing center. One player holding a rope kneels in the center of the circle as he turns the jump rope, playing it out to its full length. The partners must jump over it. Any player who touches the rope with his feet while it is turning is "out" and must wait for another turn.

Suggestions: a. Three "outs" and the person becomes the rope turner
b. Partners may keep score and try to outjump another set of partners
c. Try a set of three

DAY THREE

Activity: Movement Exploration

Title: Here to There

Directions: Two lines from 10-15 feet apart. One group on each line, partners facing each other. Children may be asked to see how many ways they can get from one line to the other. One partner comes across the line and the other mimics the action of the first.

Suggestions: a. Backward ways . . . hopping ways . . . turning ways . . . jumping ways, etc.
b. Change partners often
c. Find ways to get a ball across the line by rolling, tossing, bouncing to your partner
d. Go across together providing partners do not touch

DAY FOUR

Activity: Movement Exploration

Title: Vis-a-vis

Directions: The formation of the class is scattered with partners. If the teacher or extra student calls "back-to-back" or "hand-to-foot" or "elbow-to-knee" the children do as directed. The partners point their body part to each other without touching. If the cue "busy bee" is called, everyone, including the extra child, must find a new partner. The child who fails to find a new partner becomes the caller.

Suggestions: elbow to elbow
shoulder to shoulder
head to hand
hand to hand
knee to knee
hand to back
head to back
foot to foot
wrist to ankle
toe to toe
elbow to neck
finger to finger
wrist to ear
finger to nose

WEEK THREE

DAY ONE

Activity: Running

Title: Back-to-Back

Directions: The players are arranged in couples. Partners stand back-to back without touching. One extra player does not have a partner. Upon a signal from the teacher, all players change partners while the extra player attempts to get a partner. One player will be left without a partner each time. The game is repeated with the player who is left without a partner giving the signal for the next change. (The game may be played with two extra players).

DAY TWO**Activity:** Running**Title:** Defrost

Directions: Choose five players with identifying traits: wearing red, wearing jeans, etc. Choose two defrosters who are fast runners. Each of the taggers have a rolled newspaper to "freeze" people and the defrosters have a knotted towel to "defrost" people. The taggers, after counting aloud to ten in a huddle, start the chase. Tagged players freeze and stay frozen. The spice of the game is that the two defrosters may unfreeze any player; as he does so, he shouts "Defrost!" Defrosters may also be frozen. So as not to confuse a frozen player with an untagged one, have untagged players walk rather than stand when they tire.

DAY THREE**Activity:** Running**Title:** Trio Race

Directions: Two lines approximately 30 feet apart. One set of three children will race another set of three children by running from the starting line to the finish line. The group wins only after all three members have crossed the goal. They may not help one another by holding hands or touching in any way. After the entire class has run, the children find a new trio by the time the teacher counts to ten. Use a different locomotor movement (skipping, turning, etc.) and repeat.

DAY FOUR**Activity:** Team-Relay**Title:** Rescue Relay

Directions: The teams are in relay formation behind the starting line; one player of each team is standing on the goal line and facing his team. On the signal, this player runs to the first player in his team and as soon as he steps on the restraining line, the first player is free to run back to the goal line with his rescuer. The rescuer remains behind the goal line while the player whom he brought to the goal line goes back to the team and gets the next players. Thus, each player is taken to the goal line and returns to get the next player until all the players have been "rescued" and are in file formation back of the goal line. The team which finishes first wins the relay.

WEEK FOUR

DAY ONE

Activity: Team game

Title: Animal Trap

Directions: One half of the class form a circle (not holding hands); the other half scatter outside the circle. Circle players raise their hands almost touching. On signal from the teacher, the "animals" run in and out of the "trap." When the teacher claps her hand the trap is closed and no animal may leave the circle. All animals caught inside join the circle. After all animals have been caught change positions and start a new game.

DAY TWO

Activity: Stunts and tumbling

Title: Skin the Snake

Directions: Six people stand in a stride position with feet very far apart holding on to a rope between their legs. On signal, every member of the file, except the last player, starts moving backward. As the backward movement commences, the last player lies down on his back. The second rear player after passing over the last player, lies down. Continue this pattern until everyone is lying down. As soon as all are lying down on their backs, the one at the rear stands. Continue this pattern until everyone is standing. May be used in a relay. The children may not touch one another as they pass over the person.

DAY THREE

Activity: Tag

Title: Cut the Cake

Directions: Single circle facing center with one player in center, holding a rolled newspaper to represent a knife. The other players have their hands on their hips. The "knife" is raised over head and brought down gently between two people in the circle. These two people are tagged with the knife and must run in opposite directions around the circle. It remains in same spot to determine who gets back first. The first child back becomes the new "knife" and the game starts over.

Suggestion: Have several cakes for maximum participation.

DAY FOUR

Activity: Movement Exploration

Title: Locomotion

Directions: Partners place one jump rope on the floor in a straight line.

- a. Jump across rope on the floor in a zig-zag pattern with partner
- b. Hop across rope in a similar manner
- c. Slide the length of the rope using open-close movements with the feet. One person on each side of the rope, facing each other.
- d. Gallop the length of the rope in a similar manner
- e. Allow children to create movements getting from side to side and from one end to the other with their partners-with the exception of touching their partners

Suggestions: Change partners after each locomotor movement

WEEK FIVE

DAY ONE

Activity: Team Relay

Title: Man Hunt

Directions: The teams are in relay formation behind the starting line; one player of each team is standing on the goal line facing his team. The first player in each team has a rolled newspaper. The teacher gives commands to touch a certain part of the person standing on the goal line, for example, "SHOE!" The first person on each team responds to the command by running to touch his own team member's shoe with the rolled newspaper and then returning to the end of the line. The first team back wins the point. The second player may have a different command. (May be a continuous relay).

DAY TWO

Activity: Team Relay

Title: Variation of Man Hunt

Directions: The players stand in a relay formation; each file represents a team. The teacher gives commands to touch materials, colors, etc. All players respond to the commands and return to the original formation with each file in his own place. The team which is back first scores one point. Commands might be given such as touch brick, touch red, touch iron, touch wood, touch green, etc.

DAY THREE**Activity:** Tag**Title:** Hoo-ray!

Directions: The players stand in a line with their backs toward the goal. One child, selected to be It, stand facing the line of players and about ten feet from them, waiting to chase them to the goal. The first child in the line passes a small object to the next player as he calls "HOO-". The object is passed from player to player until it reaches the child at the opposite end of the line. The last child after receiving the object, calls, "-Ray!" This is a signal for the players to run to the goal line across the opposite end of the play area. The child who is It tries to tag the players with a rolled newspaper before they reach the goal line. The first child whom he tags becomes It and the game is repeated.

Suggestion: Have two games going on at the same time for maximum participation.

DAY FOUR**Activity:** Team-Relay**Title:** File Relay

Directions: Teams are in relay formation. At the signal, the whole file runs to the goal and back. They must not get out of the file formation.

Suggestion: Place a marker of some kind which the file has to circle before heading back to the starting line.

WEEK SIX**DAY ONE****Activity:** Team-Relay**Title:** Dressed the Best

Directions: The players are arranged in three or four teams behind a starting line as in a simple relay. The teams are in pairs. The first two players in each team run to the goal line with their partner while carrying an elastic band. When they reach the "dressing" room they take turns getting dressed by slipping the elastic band over their heads and

stepping through. When both have dressed, they run back to their starting line carrying the elastic band for the next couple in their team. Play continues until all have "dressed." A variation would be to step into the band first and then bring it over the head.

DAY TWO

Activity: Ball handling

Title: Crown the King

Directions: One player, the king, stands or sits in the center of a circle, approximately 15 feet in diameter. Five to six players form a circle around the king. They face toward the outside circle in order to protect the king. The outer players form a circle about 15 feet away. They attempt to crown, or hit, the king with a playground ball. Then a player crowns the king, he becomes the king and the king becomes a guard. The guard becomes one of the players in the outside circle.

Suggestion: Alter the number of players who are guards if they are too many or too few. For maximum participation, allow two or more games to be played consecutively.

DAY THREE

Activity: Movement Exploration

Title: Image in the Mirror

Directions: The class is arranged in couples, face to face as if looking in a mirror. The two children decide who will be the leader and who will be the image. The leader then makes movements which the image must follow. The teacher gives a signal to find a new image and the movements are continued with a new partner.

DAY FOUR

Activity: Running

Title: "You"

Directions: The players stand in a circle formation facing outward. One child, who is selected to be It, runs around the outside of the circle, pointing at each person and saying "You" until he decides to shout "YOU!" instead of saying it softly. It

continues around the circle while the runner who was called "YOU!" runs in the opposite direction. Both players try to get back to the vacant place in the circle first. The one who fails to reach the vacant place first is It and the game is repeated.

Suggestion: Have three or more of these circles operating consecutively to insure maximum participation.

INDIVIDUAL GROUP (X_3)

WEEK ONE

DAY ONE

Activity: Classroom Games

Title: Poor Pussy Cat

Directions: One child is chosen to be It and all others are seated. It walks around the room saying "Poor Pussy Cat." He decides upon a player that he wants to chase him and says to that player, "Scat!" He attempts to run to a goal before the chaser can tag him. The goal may be a blackboard, a book, etc.

Activity: Classroom Games

Title: Eraser Race

Directions: Have the first person in each row "race" to the blackboard by placing their heels and toes in rapid succession in front of each other. The person picks up an eraser and returns to the starting line. The first one who returns is the winner.

DAY TWO

Activity: Rhythms

Title: Bingo

Directions: Single circle facing counterclockwise (may have more than one circle).

WORDS:

"A BIG BLACK DOG SAT ON THE BACK PORCH,
AND BINGO WAS HIS NAME."

All skip counter-clockwise

A BIG BLACK DOG SAT ON THE BACK PORCH,
AND BINGO WAS HIS NAME."

"B - I - N - G - O
B - I - N - G - O
B - I - N - G - O

All skip clock-wise.

AND BINGO WAS HIS NAME."

"B - I - N - G - O"

Clap hands on
every letter.
Repeat.

Activity: Classroom Game

Title: Forty Ways to Get There

Directions: The child moves across the front of the room using any locomotor movement.

DAY THREE

Activity: Running

Title: Numbers

Directions: The players are divided into two teams; they are lined up across the play area contacting their team's starting line. The players of each team number themselves and remember their own numbers. The teacher and the other team is not aware of the numbers that have been assigned to each person. The teacher stands at one end of the two lines of players and calls a number (if there are 13 players on each team, the range of numbers to be called is 1-13). The two players from opposite teams must run to a goal line and return to the starting line. The person who returns first is the winner.

DAY FOUR

Activity: Running

Title: Three Deep

Directions: One player is chosen as the runner and another as It. The remaining players stand in a double circle with partners standing one in front of the other and facing the center of the circle. The one who is It chases the runner, who is safe by stepping in front of any couple in the circle, whereupon the outside player of that couple immediately becomes the runner and the game continues. Whenever a runner is tagged, he becomes It and the player who tagged him becomes the runner.

WEEK TWO

DAY ONE

Activity: Running

Title: Johnny On The Spot

Directions: "Spots" are placed on the ground in a scattered formation about the play area. (tape, markers, clorox bottles may be used) Each child should stand on or touch the "spot" with three or four extra children without a "spot." The teacher calls "Johnny on the Spot!" This is a signal for the children to run from their spot to another spot. While they are changing spots, the extra players attempt to find a spot. Only one player is allowed on a spot, and there are always players left without a spot on each change. As soon as all of the spots are full the signal is repeated and the game continues.

DAY TWO

Activity: Jumping

Title: Jump the Shot

Directions: Players stand in a circle facing center. One player holding a jump rope kneels in the center of the circle as he turns the rope, playing it out to its full length. The person must jump over it. Any player who touches the rope with his feet while it is turning is "out" and must wait for another turn.

Suggestions: a. Three "outs" and the person becomes the rope turner
b. Several circles should be operating
c. Have players count number of successful jumps so that they may try to outjump another person

DAY THREE

Activity: Movement Exploration-locomotor movements

Title: Here to There

Directions: Two lines from 10-15 feet apart. One group on each line. Children may be asked to see how many ways they can get from one line to the other.

Suggestions: a. Backward . . . hopping . . . turning . . . jumping . . . skipping ways, etc.
b. Find ways to get a ball across . . . rolling . . . bouncing . . . tossing, etc.

DAY FOUR**Activity:** Movement Exploration**Title:** Vis-a-Vis

Directions: The formation of the class is scattered with one person chosen as the caller. (The teacher may be the caller until the students get the idea.) The caller may say "hand-to-foot." The students follow the commands of the caller by placing one of his hands on his foot. When the teacher calls "busy bee!" the caller chooses someone else as the caller and takes his place with the other players.

Suggestions: elbow to elbow
shoulder to hand
head to hand
hand to hand
hand to back
foot to foot
wrist to ankle
toe to knee
wrist to ear
finger to nose
finger to finger
chin to chest
etc.

WEEK THREE**DAY ONE****Activity:** Tag**Title:** Squat Tag

Directions: The rules are the same for Squat Tag as they are in simple tag. However, the runner is safe from It when he squats to the ground before he is tagged. If It touches or tags one of the players, that person is the new It.

DAY TWO**Activity:** Running**Title:** Freeze

Directions: Choose three taggers with identifying trait: wearing red, wearing jeans, blond hair, etc. Each of the taggers have a rolled newspaper to "freeze" people. Tagged players

freeze and stay frozed. The last three players who have not been tagged become the new freezers.

DAY THREE

Activity: Running

Title: Race

Directions: Two lines approximately thirty feet apart. The players are arranged in groups of four. The first child in each group runs from the starting line to the finish line on the signal "GO!" given by the teacher. The winner is determined and the race repeated with the next four in line.

Suggestions: a. may want to have a run-off race between the winners of each group
b. use different locomotor skills--skipping, running backwards, etc.

DAY FOUR

Activity: Running

Title: Shuttle race

Directions: The class is arranged in file formations, behind a starting line. Two objects are placed on a goal line. On signal the first player in each file runs to pick up the first object. He then runs with the object back to the starting line. He places it on the line, then returns to pick up the second object. When he has crossed the finish line with the second object he has finished the race. The first person to finish is the winner of that race. The second player in each line then has his turn.

WEEK FOUR

DAY ONE

Activity: Tag

Title: Uncle Sam

Directions: There are two lines 30-40 feet apart. Place children along one line. The other line is known as the "river." One player is chosen to be "Uncle Sam" and stands in the center of the play area. The other players stand behind one line and call "Uncle Sam, may we cross your river?" He replies,

"Yes, if you have on . . . blue" (or any other color). All children wearing that color must run to the opposite side. "Uncle Sam" tries to tag as many as he can before they cross the opposite end. The last person he tags becomes the new It or "Uncle Sam." The game is continued.

DAY TWO

Activity: Movement Exploration

Title: I See

Directions: The teacher says "I see . . ." The children respond "What do you see?" The teacher says "I see children hopping." The children respond to the command.

Suggestions: a. I see children running that way (point in a direction).
b. Squatting
c. Rolling
d. Waving
e. Swaying
f. Making themselves small
g. Making themselves curled
h. Etc.

DAY THREE

Activity: Tag

Title: Cut the Cake

Directions: Single circle facing center with one player in center, holding a rolled newspaper to represent a knife. The other players have their hands on their hips. The "knife" is raised over head and brought down gently between two players in the circle. These two players are tagged with the knife and must run in opposite directions around the circle. It remains in the same spot to determine who gets back first. The first child back becomes the new "knife" and the game continues.

Suggestion: Have several cakes for maximum participation.

DAY FOUR**Activity:** Movement Exploration**Title:** Locomotion**Directions:** Each child place his jump rope on the floor in a straight line.

- a. Jump across on the floor in a zig-zag pattern
- b. Hop across rope in a similar manner
- c. Slide the length of the rope using open-close movement with feet
- d. Gallop the length of the rope in a similar manner
- e. Allow children to create movements getting from side to side and from one end to the other of the rope

WEEK FIVE**DAY ONE****Activity:** Running**Title:** Hunt!**Directions:** The players are in a file formation. The teacher gives a command to touch materials, colors, etc. The first player on each team responds to the command and returns to the starting line. The first one to return is the winner. Commands might be given such as touch brick, touch red, touch iron, touch wood, touch green, etc.**DAY TWO****Activity:** Running**Title:** Knock!**Directions:** The class is arranged in file formation behind the starting line. The first person in each team has a rolled newspaper. There is an object on the goal line approximately 30 feet away. The object may be a ball, a cardboard box, a clorox bottle, etc. On signal, the first player runs to the goal line and hits the object with his rolled newspaper. He returns to the starting line. The first player back wins. The game continues until every player has had a turn.

DAY THREE**Activity:** Tag**Title:** Hoo-ray!

Directions: The players stand in a line with their backs toward the goal. One child selected as It stands facing the line of players about ten feet from the, waiting to chase them to the goal. It says "Hoo . . . and hesitates before he says . . . ray!" As soon as he has said "ray!" the players run to the goal line. It tries to tag a player with a rolled newspaper before he reaches safety. The first child tagged becomes It and play continues.

Suggestion: Have two games for maximum participation.

DAY FOUR**Activity:** Running**Title:** Zig-Zag Run

Directions: The class is arranged in file formations. Markers are placed about ten feet apart (use five markers for each file if possible). The first person in each line runs in and out of the markers in a zig-zag fashion and returns to the starting line. He returns and moves to the end of the line. May want to have a race among each person at the beginning of the line.

WEEK SIX**, DAY ONE****Activity:** Ball Handling**Title:** Crown the King

Directions: A chair, "the king," is placed in the center of a circle approximately fifteen feet in diameter. One player is the guard and stands near the king in order to protect him. The outer players form a circle about fifteen feet away. They attempt to crown or hit the king with a playground ball. When a player crowns the king, he becomes the king's guard and the guard becomes one of the members in the outer circle.

Suggestion: Have two or more games operating consecutively.

DAY TWO**Activity: Movement Exploration****Title: Shapes**

Directions: The teacher gives a signal by clapping her hands and saying "Change!" The students follow her commands by finding a position or shape with their bodies. They remain in that position like a statue until the next signal is given.

Suggestion: Allow child to move everything except his feet . . . his arms . . . his head . . . etc.

DAY THREE**Activity: Race****Title: Dressed the Best**

Directions: The players are arranged in three or four teams behind a starting line. The first child in each file runs to the goal line carrying with him an elastic band. When he reaches the "dressing room," he steps into the elastic band and pulls it over his head. After he has dressed, he runs back to the starting line. The first one who returns wins. Another race is repeated with the next players in line. A variation would be to pull the band over the head and step out of it.

DAY FOUR**Activity: Running****Title: "You!"**

Directions: The players stand in a circle formation facing outward. One child, who is selected to be It, runs around the outside of the circle pointing at each person and says, "You" until he decides to shout "YOU!" instead of saying it softly. It continues around the circle while the runner who was called "YOU!" runs in the opposite direction. Both players try to get back to the vacant place in the circle first. The one who fails to reach the vacant place first is the new It and the game continues.

Suggestion: Have three or more of these circles operating consecutively to insure maximum participation.

APPENDIX B
SOCIOMETRIC RATING SCALE

TO THE TEACHER:

INSTRUCTIONS FOR ADMINISTERING THE SOCIO METRIC RATING SCALE

1. Pass out forms according to name circled. Ask: "Is there anyone who does not have a form with his own name circled?"
2. Read directions aloud: "In answer to the question, "Who do you like?" rate each person in your class except yourself by circling a 1 - 2 - 3 - 4 or 5 provided by each name.
1 means that you dislike the person very much
2 means that you dislike the person
3 means that you cannot decide if you like or dislike the person
4 means that you like the person
5 means that you like the person very much
3. Tell the class: "If you do not know a person in the class, do not circle a number by his name. Please complete the form yourself and do not consult your classmates."
4. Upon completion of the forms, collect them and place them in the envelope provided. They will be picked up on Friday. DO NOT MAIL.

"WHO DO YOU LIKE?"

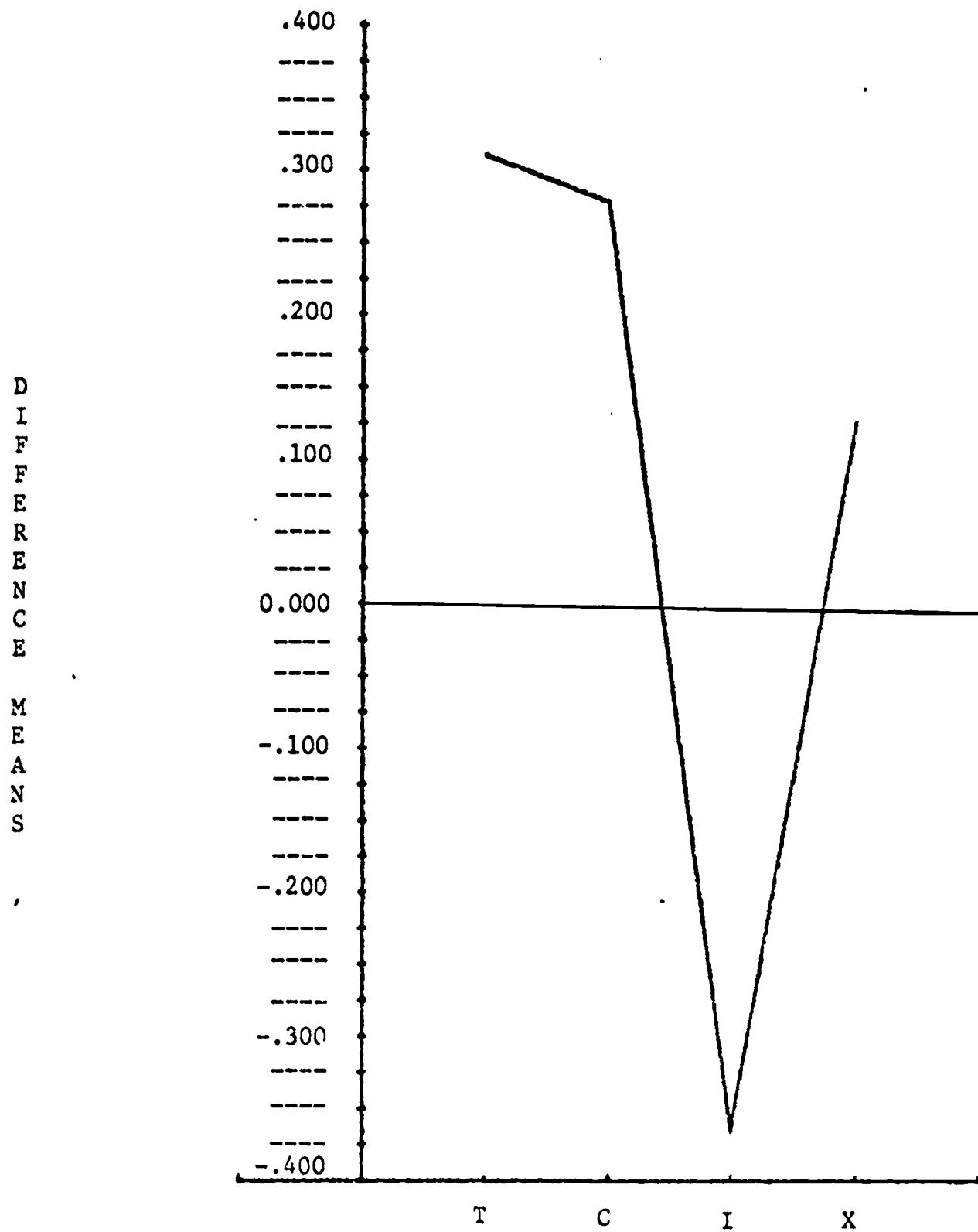
Directions: In answer to the above question rate each person in your class either 1 - 2 - 3 - 4 or 5 by circling one of the numbers provided by each name.

- 1 means that you dislike the person very much
- 2 means that you dislike the person
- 3 means that you cannot decide if you like or dislike the person
- 4 means that you dislike the person
- 5 means that you like the person very much

Beverly Anderson	1 2 3 4 5	Edward Higginbotham	1 2 3 4 5
Mell Bagley	1 2 3 4 5	Carol Gilliland	1 2 3 4 5
Lonnie Baker	1 2 3 4 5	Michael Huckabee	1 2 3 4 5
Regina Bonner	1 2 3 4 5	Dianne Knight	1 2 3 4 5
Christine Brown	1 2 3 4 5	Carl Lam	1 2 3 4 5
David Brown	1 2 3 4 5	Veronica Maclin	1 2 3 4 5
Valerie Crawford	1 2 3 4 5	Patrick Murphy	1 2 3 4 5
Bobby Sue Cook	1 2 3 4 5	Karla Page	1 2 3 4 5
Michael Cook	1 2 3 4 5	Charles Reed	1 2 3 4 5
Reginald Davis	1 2 3 4 5	Elizabeth Taylor	1 2 3 4 5
Mary Evans	1 2 3 4 5	Vicki Thomas	1 2 3 4 5
Reginald Frazier	1 2 3 4 5	Chris Tomlinson	1 2 3 4 5
Michael Garrett	1 2 3 4 5	Leo Williams	1 2 3 4 5

APPENDIX C

GRAPHS

Figure 8**Group: Blacks Rating Whites**

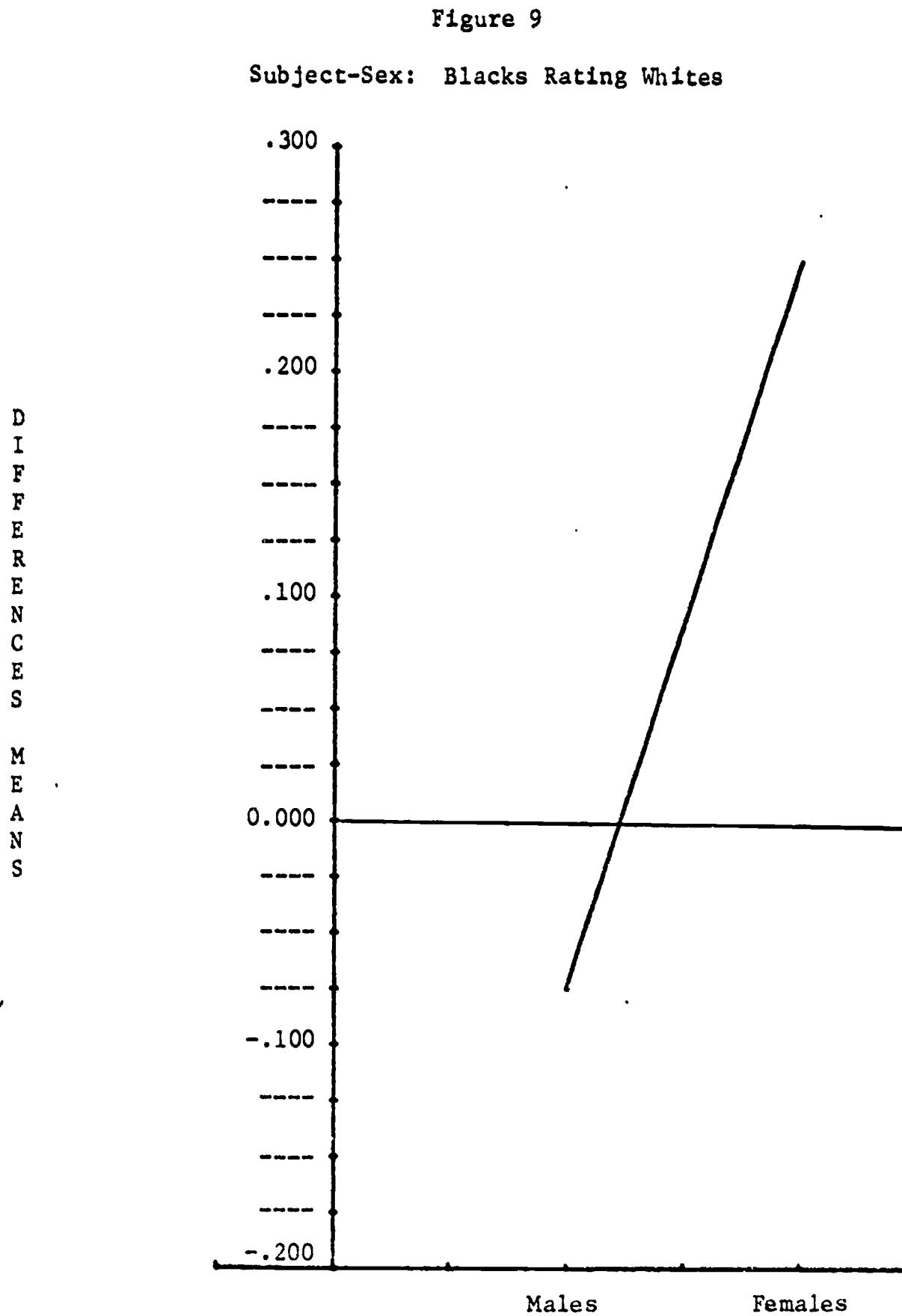


Figure 10

Group x Subject-Sex: Blacks Rating Whites

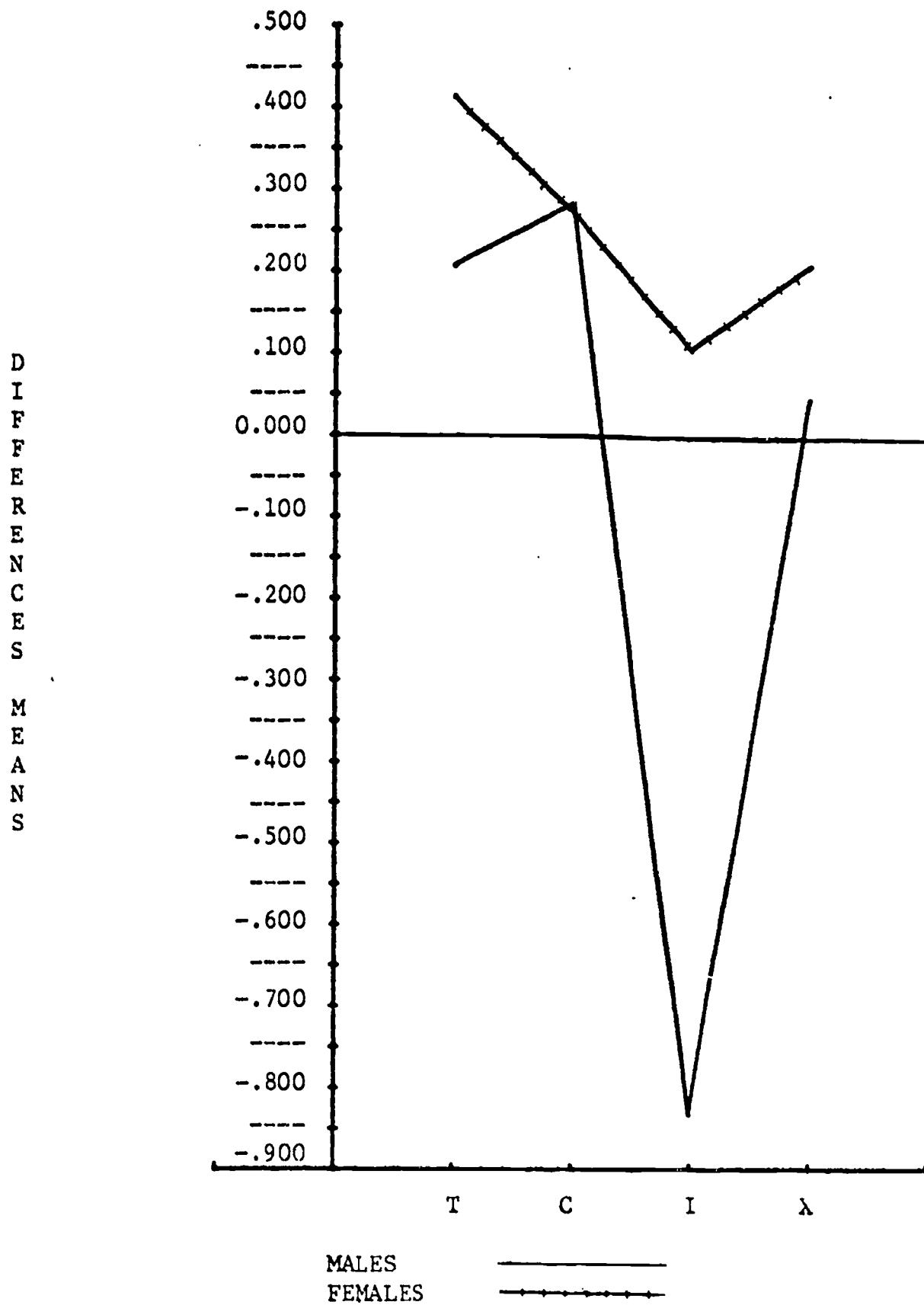


Figure 11

Group x Subject-Sex x Rater-Sex: Blacks Ratings Whites

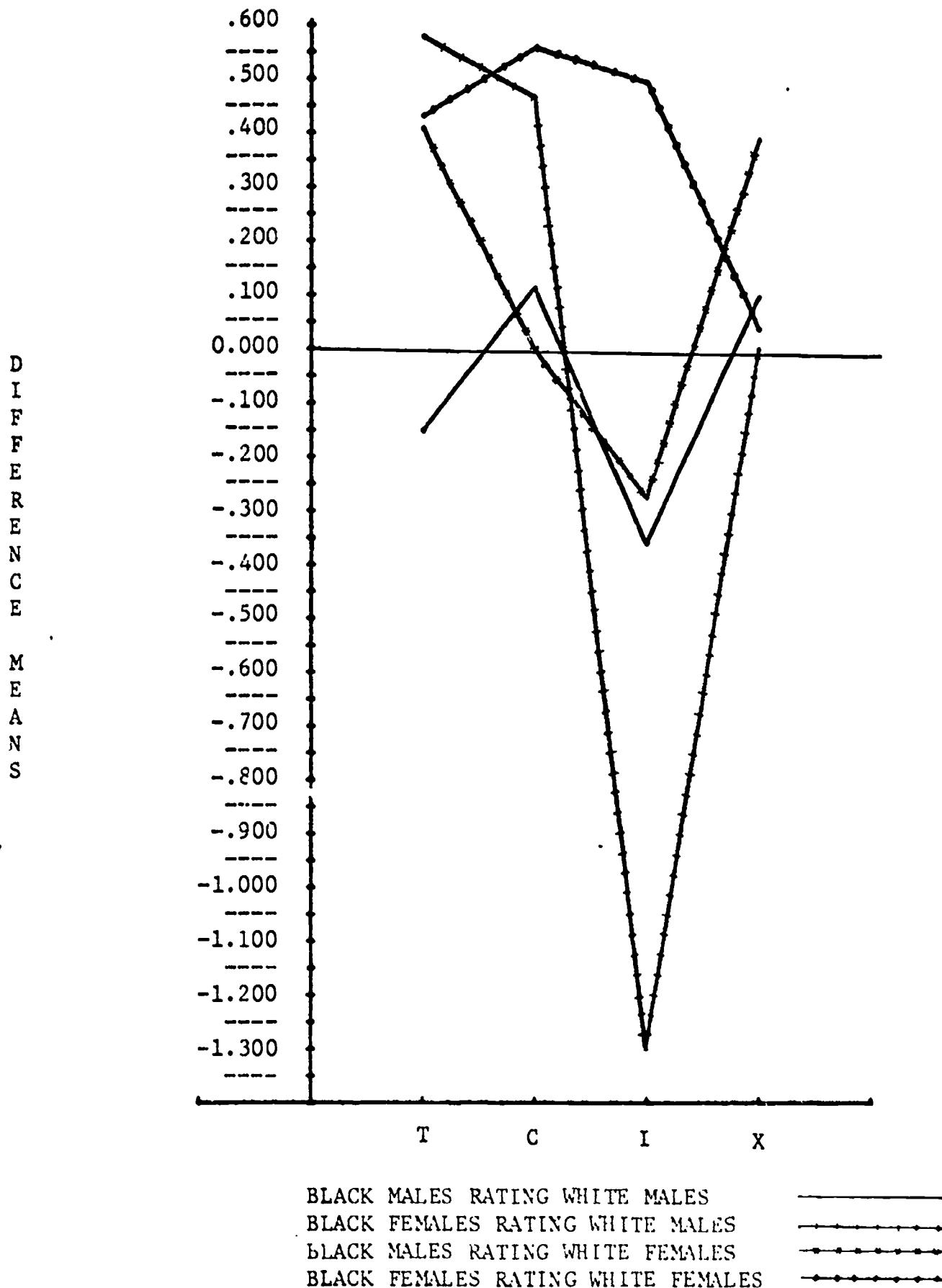


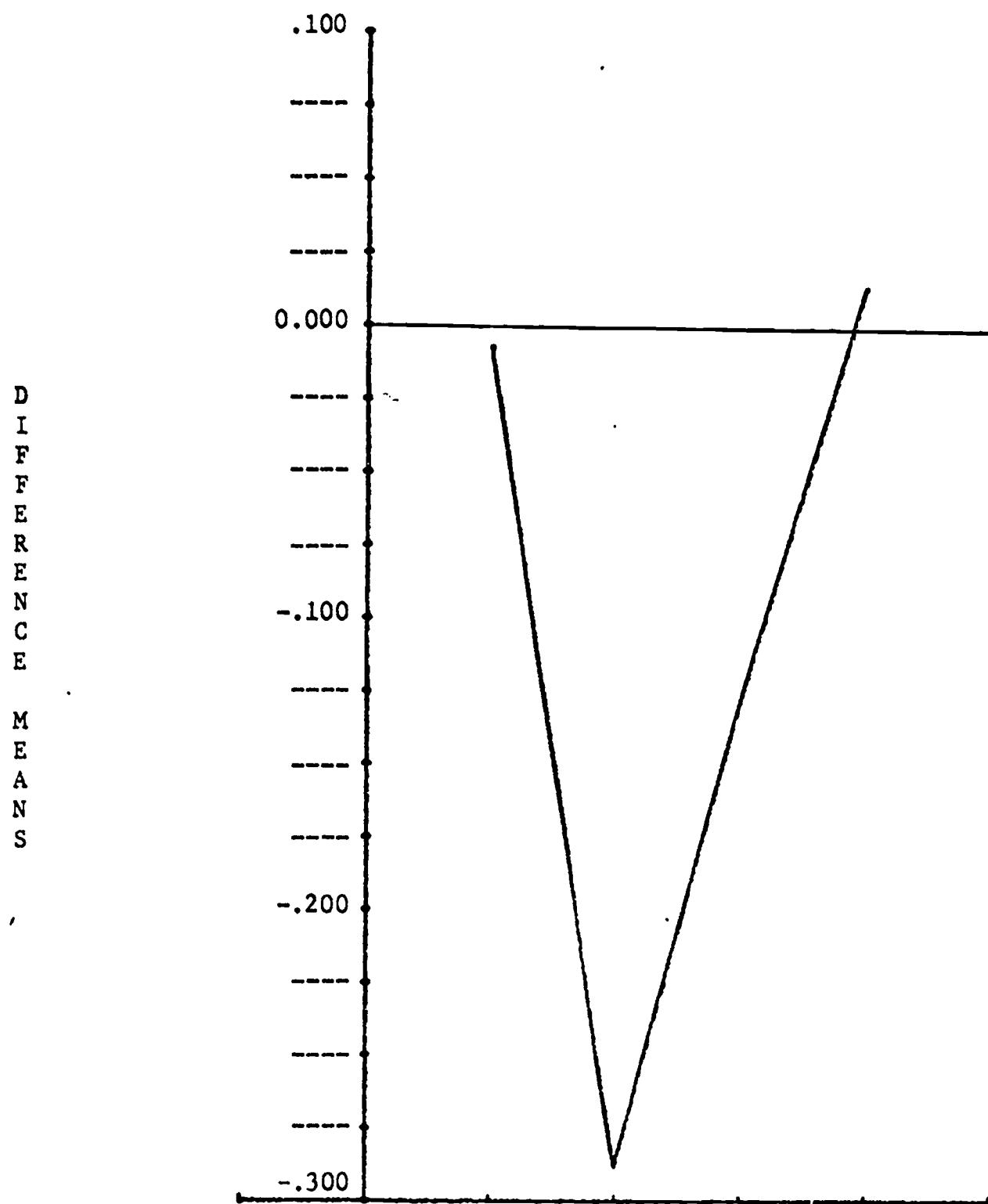
Figure 12**Group: Whites Rating Blacks**

Figure 13
Group x Subject-Sex x Rater-Sex: Whites Rating Blacks

